HOSPITALS

THE JOURNAL OF THE AMERICAN HOSPITAL ASSOCIATION

VOL. 13 APRIL, 1939 No. 4

The Place of the Government in the Program of Health Care

MALCOLM T. MacEACHERN, M.D.

THE Interdepartmental Committee on the National Health Program has recommended extension of the work being carried on at present under Social Security and other organizations, in child welfare, in maternal welfare, in mental hygiene, in crippled children's work, and in social diseases. The crippled children's program has been very extensive for a considerable time.

We hope that the governmental hospitals, as now constituted, will continue to limit themselves to the policies which they have adopted; and we hope that the voluntary hospitals will share in the program as far as they can through a cooperative plan between governmental and voluntary hospitals.

Presented at the Thirteenth Annual Convention, Association of Western Hospitals, Seattle, February 23, 1939.

The Author

● Dr. Malcolm T. MacEachern is the Associate Director of the American College of Surgeons, and Honorary President of Association of Western Hospitals.

We have the Federal hospitals—Army, Navy, Public Health Service, Veterans' Bureau, Indian hospitals, and station hospitals that look after the encampments of soldiers—and we know they are all established and have been established for specific purposes for years. These hospitals are doing their work well. They are always ready to adopt anything for the betterment of the patient. Our Federal hospitals of the United States deserve great commendation.

In Canada, the government hospitals are for the veterans. They are on the same general plan, but not as extensive as the veterans' hospitals in the United States.

Federal Hospital Extension Program

Analyzing the Federal hospital extension program in other fields, I cannot say very much about it other than that five hundred new hospitals have been proposed, as you know, to be built in different counties where there are no hospitals at present. The Technical Committee has based the number of hospitals on 4.5 general hospital beds per thousand as a ratio. That was a good ratio several years ago; but with the increase of preventive work and the decrease of the number of hospital days per patient from an average of 24 days to 12, we do not need 4.5 beds per thousand. When a community is surveyed now, it usually runs about 2 or 3 beds per thousand at the most.

It is impossible to establish a hospital bed ratio in any community without determining the conditions. In an industrial community, where there are a large number of families and a large number of children in each family, especially in the lower income group, you will need different kinds of accommodations than you would where there are many people in the higher income group. You have to consider the type of people and the wealth of the people when you determine the ratio of beds to population.

The Interdepartmental Committee recommended five hundred new hospitals, which would cost considerable of the $800,000,000 program. That has been opposed in many quarters, but with the desire that the subject should be considered very carefully; and where there is need for a hospital, it should be established.

We all hope that some of the money will go to hospitals already existing, to develop such efficient operation that they can do the work that this new program will demand.

For instance, there are 4,500 hospitals of 50 beds and under in the United States; and out of that group, there are only 700—700, think of it!—meeting the minimum requirements which we set down, and you know the minimum requirements are very liberal and very easy to attain. We have 3,600 hospitals in the small hospital group that are not meeting minimum requirements. That is a very important point, and one which we should consider very carefully. It is very difficult for the hospital under 25 beds to meet even minimum requirements, excepting in extraordinary instances, where the doctor in charge, the chief surgeon, or someone, puts his own money that he earns into the hospital. That is why the number of hospitals under 25 beds has been rapidly diminishing. I think we should consider 20 or 25 beds as the minimum size hospital to establish. The other day I advised a man not to establish a six or eight bed hospital. He cannot run it. He cannot give modern service unless he has an endowment or sufficient money. He cannot give the service that is required today, and he might as well face that issue before he builds.

One of the reasons that might explain the number of hospitals required in this committee's report is in using the county as a unit for estimating the need. Take, for instance, Cook County, Chicago, right next to Kendall County. Kendall County has no hospital; but if its patients travel 20 or 30 miles to Chicago they can make arrangements for care in the best of hospitals.

Four or five years ago Dr. Bert Caldwell and I figured out that there was a reasonably good hospital within 30 miles of 98 per cent of the population. I was challenged two or three times on that statement, and I feared that we might be a little wrong, so I kept quiet over it. The American Medical Association doubted it, and they made a survey. Their survey was made by actually getting the information right on the spot. They found that there is a registered hospital within 30 miles of 98.8 per cent of the population of the United States. In other words, 1.2 per cent of the population are not within 30 miles of a registered hospital.

It is quite true that the registered hospital is not always up to the mark, but the hospital is there. Therefore I feel, instead of building 500 more government hospitals, let us determine by actual survey which ones we need, and establish them on a cooperative plan, government plus the community, as the Commonwealth Fund does. That would probably work out much better than having to set up a new series of government hospitals. There should be a cooperative arrangement. I hope that will happen.

If there are places in the United States not covered by hospital service, we hope that the government and the people of the communities will have cooperative arrangements whereby hospitals can be established, and these hospitals run by a community board, that is, citizens of the community.

Providing Pathologists and Radiologists for Small Communities

The committee reporting on the lack of available

service of pathologists and radiologists, expressed a hope that they could put pathologists and radiologists in these small communities and supply the need. I would like to call your attention to the fact that there are only 800 qualified pathologists in the United States today, and we have 3,639 hospitals of 25 beds and over that should be supplied. The small hospital will have to share that service, and perhaps get it at long range for many years to come.

The same applies to radiologists. There might be 1,100 competent radiologists in the United States, and they could not cover all the 3,639 hospitals by letting each one have one radiologist. It would be a very fine thing if we could. It is desirable to have radiology and pathology services available out in the rural districts; the practicing physician of today will not stay there unless he has these advantages with which to practice medicine.

Expanding the Service Within the Hospital

The program of hospitalization will have to be extended; at least development of hospitals will probably be necessary, and I hope it will be extension in existing hospitals, particularly those that are not of the governmental type entirely. There will be many things that your hospital should do, but they will have to open their services to the extension of health programs.

For instance, the maternal welfare program is very active, through different states, and usually with the cooperation of organized medicine. The hospitals in the community will continue to take care of the demands of that program as they are now distributed. I believe that a large portion of the maternal welfare program will come into the voluntary hospitals or the nongovernmental hospitals as such. Maybe some of the state hospitals, which are under state administration, will take some of the work over, as they are taking other general work at the present time.

We know very well that child welfare work, too, will be in demand in the hospitals in some of the communities. The crippled children's work is now in considerable demand and is being handled efficiently in the different states. The authorities have used very great discretion in selecting only hospitals that are qualified to do the work.

The social diseases program may cause additional demand on the hospitals for the care of cases that should be hospitalized, and the cases that should be segregated from spreading infection. I doubt, however, if the government hospitals as set up at present will participate more effectively in this program than they do at present.

State Hospitals

When we come to the next group of government hospitals, we have state hospitals taking care of mental diseases and tuberculosis, mainly, and that is the state's function, and the state's responsibility.

In the extension of the mental hospital program, no doubt these governmental hospitals in the states will play a much greater part, and a great deal of money will be expended in mental hospitals to bring them up to the requirements and extend their facilities. The state has always been looked upon as being responsible for the care of mental diseases and for tuberculosis and tuberculosis institutions. Tuberculosis has not been mentioned as much because we are making such fine headway with that disease.

It is quite true that we still have voluntary and private hospitals taking care of mental diseases and tuberculosis, and they will continue to do so; but I am certain that the government hospitals, now taking care of mental diseases, will have a much more active program. This program of health extension will not be so much hospitalization as mental hygiene, the prevention of mental diseases. Any hospital can participate in the program by developing facilities for mental hygiene clinics. When it comes to hospitalization, the governmental hospitals will probably take care of almost all of it, though many of the voluntary hospitals will do their part through their psychiatric departments.

I believe that you will see quite a development in our general hospitals and voluntary hospitals in the near future in establishing psychiatric departments for the care of the mental cases before they become chronic, or before they are admitted to the larger institutions. I think that the mental disease program or mental health program will really cause a great demand, first, on governmental hospitals as now set up, and second, on the voluntary hospitals through establishing mental hygiene clinics, and establishing psychiatric divisions where the cases can be observed before being committed to the large institutions.

Two Types of General State Hospitals

The state governments have operated general hospitals; they are of two types. There are the general hospitals, which are the teaching hospitals in the university medical centers. These are fine teaching institutions, established under boards of regents, and are free from politics as a rule. They will probably come in for considerable of the program, particularly in the way of research.

This activity will bring them additional work, just as it would the ordinary hospital.

We have another kind of state government general hospital that we find in the South. We find them in Pennsylvania, Mississippi, Louisiana, but not so many in the Middle West or the West. They are state hospitals taking care of general diseases.

Unfortunately, state hospitals, non-university connected, taking care of general diseases, have not proved of exceptional value anywhere. We know that these hospitals under state government control are usually political patronage systems. Their budgets are low, there is usually a large turn-over in personnel every time there is a new election, and they have not established very high standards. We find their physical plants are poor, their equipment is poor, and their personnel is reduced. In one such hospital in the South, they are still sleeping two in a bed. They have one surgeon-superintendent doing all the work in the hospital without a well organized staff.

In Pennsylvania we are trying to improve these state-owned government general hospitals as much as we can, and I think we are making some progress.

As far as state-owned hospitals are concerned, they have made fine progress in tuberculosis and mental diseases, and in general hospitals which are university school connected. Many of the general state hospitals not university connected will either have to go out of business or come up to the standards in physical equipment and organization.

I think the state should stay out of the general hospital business, excepting where the university-type of hospital is established, and should confine its efforts to tuberculosis and mental diseases. The state does not, to any great extent, go into care of infectious diseases.

County Hospitals

Passing from the state, we come to the next unit, the county government; and as you know, we have county hospitals all over the country, seven or eight hundred of them. Some are excellent, some are good, some are mediocre, and some are very poor. These county government hospitals are usually run by the county commissioners or an elected board, and almost without exception, they are politically controlled. In hospitals such as in Seattle, Southern California, New York, St. Paul, and a few others, they are fairly free from political interference. The great move in county hospitals at present is to establish a community board, which will run the hospital, or an institutions committee as they have in Alameda. Alameda County in California probably has the best system of any county hospital in the way of a board that is free from politics. There are other places, but I could almost count on my two hands the number of county hospitals that are absolutely free from politics. That has been the only condemnation we have. They are magnificent institutions, many of them, and doing fine work, and we have great respect for them.

Those county hospitals will share in this health program very considerably, not so much in the paying cases as in the free cases. They will share a great deal in that work. They are limited in their capacity in almost every community, and therefore will have to have extension. I would rather see this work distributed to the empty beds in voluntary hospitals and paid for by the municipality or county rather than build extensions to our county hospitals.

Role of the Voluntary Hospital

In the city of Chicago, the county hospital probably dispenses $3,000,000 worth of charity a year to patients, and the voluntary hospitals an equal amount. If our local governments would realize that these voluntary hospitals should be paid the cost of service, you would find that the county governments would save a lot of money. It would bring about a very great economy, and much better service, too, in many instances. Therefore, we should work toward that adjustment.

We are advocating in Chicago at the present time that charity cases be distributed to empty beds in voluntary hospitals, and that they be subsidized for the cost of care. They are only getting $3.75 a day, and for a clinic visit about 60 cents. This is not paying all the cost. However, it is better than nothing at all.

We would like to see the county hospitals under community boards; the voluntary hospitals filled up with overflow cases, and subsidized, without political control, by the governmental unit which they serve. That would be a very happy situation. I do believe the county hospitals, as such, will come into considerable advantages by taking care of the ramifications of this program, so that such cases may be hospitalized, and the clinics now set up may be used for the various activities mentioned.

City Hospitals

Coming to the municipality or the city, we find here again, but not so frequently as in the counties, that we have magnificent hospitals. These city hospitals usually confine their activities to general work or to the specialties, particularly infectious diseases, and sometimes tuberculosis, just as the county hospital takes care of infectious diseases and tuberculosis. The city hospitals are much like the county hospitals in the type of cases they will admit, and they will participate in this program to a much greater extent as far as hospitalization of cases is required, if this program goes through. I can say about them what I said about the county hospitals, that they are better off under these administrative or community boards, because they can get away from political interference. After all, we want stabilized staffs and stabilized personnel and stabilized services in these institutions rather than be compelled to make changes every two or four years.

I am not criticizing city and county hospitals, because I think they are doing a fine piece of work under existing conditions, but there are some things that should be eliminated in their policies, and I do hope they will be eliminated.

Cooperative System of Government and Voluntary Hospitals

You may ask the question, "Is there not the chance that this might develop into a completely socialized program such as we have talked about for the last three or four years?" Such is not the intention. The intention is to extend this program into the present existing facilities; to supplement them in every way possible, and to do it on a sane and sensible basis. Dr. Fishbein, speaking before a Rotary Club, said that if they put in a compulsory system of health insurance for all the people of the United States, it would be 4 per cent of the national income, which would be $2,800,000,000. I do not know whether he included hospital service, but under any system of compulsory health insurance there would be a tremendous amount of money required. It would be a tremendous drain on the national budget if it were a compulsory scheme.

On the other hand, there would be some threat to the voluntary hospital system. The voluntary hospitals might be taken over and run as a governmental measure under governmental control, so that all the health and hospital activities would be put under government control. That would alarm a great many, and particularly hospital people, because of the large part that the voluntary hospitals play in this program.

That would be a great disturbance to our present system. It seems to me it is something that will not happen in this country. We are blessed in the United States and Canada with a cooperative or joint system of government and voluntary hospitals. When I was in Europe traveling through the different countries, I was looked at with great suspicion over the idea that we could have any hospital in the United States and Canada that was not government controlled or state owned or under the taxation system. They can not understand yet how we can run voluntary hospitals here; how we get enough money to run them and how we do the work we are doing. They want to look into it, because it is a new system to them.

They always seemed to doubt me when I told them how we care for the sick under such a system, because they thought it should be all government owned and government controlled.

I believe that we can maintain in this country and in Canada, the government hospital side by side with the voluntary hospital, working as we are at present, under the present plan. And with the indigent cases in the voluntary hospital paid for the full cost of care we will have an excellent system. It is well for us to keep in mind that the doctors of the United States are contributing a million dollars a day to free service. They are willing to do it, and I do not think that they are any the worse for doing it.

Some doctors would like to get paid for that work, some would not. That is a problem that has been discussed. I think it is a fine tribute to them that they have been willing to accept such a condition for so long.

Conclusion

Therefore I would say, that in this extension of the program which has been proposed in various ramifications, we hope that governmental and voluntary institutions will share in the work, through a well worked-out plan. We hope that the time will never come when our voluntary hospitals will be taken over and run under government control. We feel that, while the hospitals might be efficient (because our Federal hospitals in the United States are excellent) at the same time we would destroy a great system of voluntary effort, that fine thing beyond description, which brings into the hospital such a unique atmosphere and a high type of service. It is

something which our people like to give; and there is no better way that the people can contribute to the sick and injured than through these voluntary hospitals.

After a lecture I gave to the ladies of the American Red Cross recently, I said to one of the women, "You are a wealthy woman; tell me why it is that you and your debutante daughters were in there listening to my lecture today? Why aren't you having some fun downtown at a tea or something?"

She said, "I am shocked to hear you talk like that. The greatest pleasure that my debutante daughters and I have is to be able to do something for the sick and injured, and I am not going to bring them up any other way. I would rather be in the County Hospital or in St. Luke's Hospital or somewhere doing some little task for the patients than at any afternoon tea. That is where I get my greatest enjoyment. I am going to leave my money to good causes, after I provide for my family. It is all going to the care of the sick and injured. That is my happiness." I think it is so with a great many people. If we took the pleasure of service out of their lives what would happen?

Now, I do not say that the government hospital cannot be humanitarian, but I do say that not many of them, so far, have that spirit. That humanitarian spirit which you find in the voluntary hospital is naturally better because it is the foundation of the system. A hospital should not be run cold-bloodedly and efficiently without the humanitarian aspect. I would hate to see that driven out of our institutions. And remember, the voluntary hospital is the back bone of the hospital system of the United States and Canada. I do think that we should all work for it as hard as we can. We should stir up our efforts more than ever before.

It is our patriotic duty, because in this way we are helping the government of this country. The more voluntary work we do the more we are helping the taxpayer, helping the country with all its tremendous debt, and helping out the country in case of a catastrophe. Voluntary hospitals always stand ready and willing to help. Every one would give the last bed in the institution if there was a calamity in any community.

I hope that the day is coming fast when there will be more consolidation of effort between the two types of organizations. Each will do its share to fill the whole service to the community and to the country as a whole. There are many aspects of this that I could discuss. After all, I would only be prophesying. We have not seen the result yet. There may be changes. Let us hope they will be carefully directed, whatever changes do come.

The Twenty-Fourth Annual Convention of the Catholic Hospital Association of the United States and Canada

M. Ray Kneifl, Executive Secretary of the Catholic Hospital Association, announces:

"Under the patronage and by the invitation of His Excellency, The Most Reverend Samuel A. Stritch, D.D., Archbishop of Milwaukee, the Officers and Executive Board of the Catholic Hospital Association of the United States and Canada announce that the twenty-fourth Annual Convention of the Association will be held at the Milwaukee Auditorium, Milwaukee, Wisconsin, June 12 to 16, 1939."

The annual convention of the Catholic Hospital Association is one of the most important gatherings of representatives of hospital institutions of the United States and Canada. The excellent programs which are arranged for these conventions and the educational and commercial exhibits, always important features, attract a large attendance. Every field of hospital operation is covered in the programs of the sessions.

The spiritual values of the church hospitals, cultivated and nourished by the Catholic clergy and Sisters, create the dignity and charm which is so apparent at the annual meetings of the Catholic Hospital Association. This year the convention in Milwaukee will bring the largest gathering of representatives of these institutions, and others interested in the voluntary hospitals, in the history of the Catholic Hospital Association.

Hospital Administration and Its Relation to the Program of Health Care

Developing Good Will—Personnel and Public

G. OTIS WHITECOTTON, M.D.

HOW many of you recall the story of the farmer to whom a high pressure salesman was attempting to sell a book on scientific farming? The farmer said nothing throughout the sales talk but at its conclusion remarked, "I have no doubt that your book is all you say it is but it wouldn't do me a particle of good. You see, I'm not using all I know now." How true this is of a great many of us in the hospital field. We are aware of many things that would undoubtedly enhance our service and add to the reputations of our hospitals but we fail to put them into effect. It may be due to the added cost and, if so, our failure to do so is perhaps justified unless increased income would result. However, in a good many instances, I feel that pure procrastination is the answer and this is of course inexcusable.

In discussing any subject it is rather essential that we know at the outset just what we are considering. The term "good will" is in common usage but we are not always sure of its exact significance. Webster defines good will as "a kindly feeling" or "well wishing." Either of these meanings is most appropriate under certain conditions but each seems rather inadequate when we are thinking in terms of employee or patient good will. It would appear that "loyalty" or the devotion implied in the term "esprit de corps" might more fully describe what we mean by the term as applied to the employee. When we consider the good will of the patient we are confronted still more forcibly with the need for a stronger definition. It requires more than just a kindly feeling toward a hospital to render a patient ready and willing to place his life in the hands of the institution for in his own mind that is just what he is doing. We would probably be much nearer the truth were we to describe it as "complete confidence" or "abiding faith."

In industry the good will enjoyed by the manufacturer of a product depends on several factors but the most important is the ability of his product to measure up to what is expected of it in the minds of the buying public. This good will is manifested by the public in its willingness to repeat purchases and to say a good word for the product. However, the retailer of the product plays an important part in establishing this good will and should he antagonize the buyer he will not only fail to build up his own good will but may well destroy that enjoyed by the manufacturer. In the one instance it is the product and in the other the placing of that product in the hands of the consumer in a manner that pleases him. However, in the entire procedure there is a reciprocal dependence on the part of the manufacturer and the retailer, for a poor product may wreck the good will of the latter through no fault of his own, while poor salesmanship can reflect on an excellent product.

When we consider our own field the analogy still exists but in a slightly altered form. Here we must assume the dual role of manufacturer and retailer, for the excellence of the product of our hospitals is largely dependent on the type of service we are prepared to render and the calibre of that service is entirely in our own hands. Failure on our part to discharge our obligation to the fullest extent will uniformly result in a poor product, a patient with anything but confidence in the institution. Here again we see a reciprocal relationship in that the service makes for a product of which we can be proud and that product goes forth to sell our service. The combined picture creates the good will for which we are striving, and the best evidence of its success lies in the willingness of the patient to return to us should the occasion ever arise.

Essential Elements in Developing Good Will

Let us suppose we are deliberately embarking

The Author:

● **Dr. G. Otis Whitecotton is the Medical Superintendent of Stanford University Hospitals, San Francisco, California.**

Presented at the Thirteenth Annual Convention, Association of Western Hospitals, Seattle, February 23, 1939.

on a program which has for its express purpose the development of good will. What essential factors are we going to consider and how is each to be handled in order that we may bring about the desired effect and attain the best results? There are many elements entering into the problem but by eliminating here and combining there we can reduce them to four major classifications, namely:

1 Personnel
2 Staff
3 Patient
4 General Public

They are listed in this order not because of their relative importance, for each is equally significant, but because in this order the logical development of the program can best be discussed.

Personnel

For some time we have been in the midst of a period of labor unrest, an unrest that for the moment seems to be quiescent but which may at any time suffer an acute exacerbation. Fortunately hospitals, because of the very nature of their service, have been comparatively free from labor difficulties although from time to time there have been isolated instances of interference with service. Capital, and I use that term without any attempt to be facetious as regards hospitals, has made an attempt to improve conditions. In some instances this has been brought about through Federal legislation. However, this legislation has been so designed as to exempt charitable institutions, thus relieving our voluntary hospitals of a burden nearly all of them would be unable to bear. I have always maintained, and will continue to do so, that hospitals should pay the highest wages possible commensurate with their financial structure providing such a move does not place an undue burden on the patient.

Loyalty—We have already characterized employee good will as "loyalty." Do any of you think you can purchase loyalty? It cannot be done no matter what we may pay our personnel unless there are other factors brought into the picture. True, highways in combination with good working conditions and an understanding personnel policy may bring about the desired "esprit de corps" but the pay check alone never can do so. Assuming for the moment that the vast majority of our institutions cannot compete with industry in the matter of remuneration, what can we do to inspire loyalty and develop personnel good will?

I think we are safe in assuming that loyalty is a direct measure of the respect in which the "boss" is held. Do you *demand* respect because of your position as the head of the organization or do you, by the very nature of your qualities of leadership and understanding, *command* the respect of your employees? There is a vast difference. Do you realize that the average employee is working for his boss and not for the organization; that to him the boss is the personification of that organization, and the one to whom his loyalty is directed?

No matter how lowly the task the individual may be assigned to perform, to him it is of the deepest importance and he likes to be made to feel that he is contributing to the success of the institution. How easy it is for us to pause in our daily rounds and chat with an employee concerning the work he is doing, and how much it means to him to feel that we have something in common, that we are both working for the good of the patient. I have had the good fortune to personally inspect some two hundred hospitals, usually accompanied by the administrator. In those in which this policy was practiced the effect was evident everywhere, while a very different atmosphere prevailed in the institutions of those administrators who failed to establish such contact. This same attitude must be engendered in the mind of the employee as regards the head of his department and it is important to keep this attribute in mind in selecting department heads.

Open door policy—Do you maintain an "open door" policy for department heads and personnel alike or do you see the former only at stated hours and refuse to see the latter at any time? Individual department heads should have regularly established periods for the discussion of problems with the administrator but they should also be made to understand that they are welcome at any time to present a problem for solution.

Joint conferences for all department heads with the administrator should be scheduled at fairly frequent and established intervals for the discussion of general problems or those of an interdepartmental nature. These offer the benefit of group discussion, a pooling of ideas, and, of primary importance, serve to stamp out petty jealousies and misunderstandings which tend to arise between the heads of departments.

Employees should be given to understand that they may see the administrator on any occasion but that they must not waste his time. Complaints regarding unfair treatment of employees by department heads should be listened to in their entirety but no conclusions should be drawn until the department head has had an opportunity to present his side of the issue. If a fair conclusion still does not present itself, out of all fairness to both concerned they should be talked to jointly

and the situation reviewed in this manner. One or both may be in error but care must be exercised not to embarrass either in front of the other. You cannot afford to lower the employee's estimation of his departmental chief for the latter must maintain discipline. However, you have retained the respect of the employee by having offered him an opportunity to state his case and he is secure in the knowledge that he has received a fair deal.

Job security—Job security is uppermost in the minds of nearly all employees and many have joined a union with the idea that this affiliation will insure them continuous employment and protect them against layoffs. The institution should make it a policy to assure all personnel that employment will be continuous as long as their services are satisfactory; that affiliation with a union is no concern of the administration but that they need not pay tribute to any organization in order to work there; and lastly, that such affiliation will not keep them at work in the event their services prove unsatisfactory. The hospital is no place for a closed shop and the administration must retain the right to hire and fire as it sees fit.

Food—When supplied as a part of the employee's remuneration, food should be of good quality, well prepared, and served in an appetizing manner in pleasant surroundings.

Working Hours—Hours on duty should be as short as possible consistent with good operation, never more than eight hours per day, and with one full day off each week. Straight hours should be enjoyed by all personnel where this is possible, admitted exceptions being in the nursing and culinary departments, but these employees recognize this fact and accept employment knowing that broken hours are a necessity.

Vacations on pay will vary with the institution but there should be a minimum of two weeks after one year's employment and an equal amount of sick leave on pay. Wherever possible the sick leave should be allowed to accrue, otherwise employees will contrive to use their full time each year unless they are exceptional individuals.

Care in Illness—There should be some provision made for the care of an employee during illness and this has been rendered comparatively inexpensive with the advent of the hospital insurance plans. The institution should urge the employee to protect himself through this means and should offer to pay a portion of, if not the entire, premium. Medical and surgical services should be supplied free of charge by the members of the house or visiting staff for employees and their families whose incomes fall below a certain level.

Such a program should assure the institution of a personnel good will that will be manifested by every employee and translated into terms of better service and cooperation throughout the organization.

Medical Staff

It would be quite unreasonable to consider the development of public good will without giving a good deal of thought to the part played by the members of the medical staff. We must think of them in terms of their loyalty just as we have done in the case of personnel. On the other hand we must give thought to the question of gaining their confidence just as we would with the public. No physician will entrust his patients to an institution whose services he has had occasion to question. They are actually the liaison between the hospital and the public and I like to think of them as "Ambassadors of Good Will." They are in a position to clear up misunderstandings and overcome prejudices that would never come to our attention. How often does the patient actually exercise his right of free choice of hospital? Very rarely I should say, for he will usually accept the recommendation of his physician.

Do you ever seek suggestions from the individual members of your staff as to how the service might be improved and do you give due consideration to such recommendations as are offered voluntarily? Staff members are in a position to see things which you may have entirely overlooked because of your proximity to the picture, and we would all do well to seek their advice from time to time. We are prone to pass off such suggestions as of no consequence and then later have occasion to wonder why the physician in question is taking his patient elsewhere.

The attitude of your reservation clerk, the courtesy and alertness of your floor nurses in making rounds with the doctor, the condition and "vintage" of your floor and operating room equipment, the dispatch with which orders are carried out, the untiring efforts of the telephone operators to get calls through to physicians who are in the hospital, the accuracy and speed of the surgical secretary, all these points are of deepest concern to the staff man and should be to the administrator.

Did you ever chance to see a surgeon garbed in an operating suit three or four sizes too large for him? If you have not you have no idea what it does to his dignity. I would certainly advise a sufficient supply of all possible sizes on the shelves of your surgeon's dressing-room or, better still, have the orderly see to it that a suit of the correct size is always kept in the assigned locker of each surgeon on the staff. He will appreciate it. It

is of just such seemingly minor strands that the fabric of staff good will is woven.

Individual Patient

Who is the most important individual in the hospital? He is not the president of the board of directors, not the chief of staff, and not the administrator. He is the patient, the sole reason for the existence of our institutions and for whose ultimate benefit every one of our activities is designed. From the time he enters our doors until we bid him Godspeed we should bend every effort to make him feel that his well-being is our chief concern. Each service performed must be carried out in a manner that will gain his confidence, not by an ostentatious display of hustle and bustle but through unobtrusive and quiet efficiency.

Admitting Procedure—What is the most important period in the patient's hospital sojourn? It is the first quarter hour after he enters our doors, and this is particularly true if it chances to be the occasion of his first hospital entry. We who are in daily contact with hospitals are inclined to become calloused and too seldom do we realize what a terrifying experience it can be to some people. In such a state of mind first impressions are usually lasting impressions so that at this point an attitude of sympathetic understanding on the part of the admission clerk is of inestimable value to the institution.

The admitting procedure should be as short as possible, the information data being obtained from a patient comfortably seated in a private or semi-private office and not forced to stand before a counter. In taking a patient to his room never subject him to the embarrassment of having to ride through the corridors in a wheel chair if his condition is such as to enable him to walk, for that experience may dissipate any feeling of good will generated at the admission desk. It would be best to have your clerk inquire as to the patient's needs in this regard at the time his physician makes the reservation.

The hostess—After an interval during which your new guest has had an opportunity to become somewhat accustomed to his strange surroundings he should receive a call from the hostess. This contact should be established as early as possible, as a matter of fact at the admission desk if this can be arranged, and should be maintained throughout the patient's stay on an informal and non-professional basis. A hostess chosen for her ability to meet the public, who keeps herself well informed on current topics of interest, and whose every act is courtesy itself, is of incalculable value to the organization. She is in a position to note certain things that may be a source of irritation to the patient and to see that they are rectified before ill will is born.

The Dietitian—One other contact that is potentially productive of good will is that of the dietitian. The problem of feeding the patient is of the utmost importance and if not correctly handled can be made the basis for the most severe criticism. A visit from a representative of the dietary department can be the means of explaining to the patient just what restrictions, if any, have been ordered by the physician. Then, by means of skillful suggestion, the dietitian can work out a menu that will appeal strongly to the patient, one that he will feel he has chosen for himself without coercion but which will not go beyond the restrictions. Once properly established, this daily visit will be looked forward to with no little pleasure.

The administrator should make an effort to visit every patient when he can possibly do so, but in a large institution such a program is a physical impossibility in conjunction with his numerous administrative duties and would leave little time for the latter. This problem is best solved by the hostess who can give her entire time to patient contacts and who is in a position to report to the administrator any situation requiring his personal attention.

Criticisms—There is no denying the fact that our friends tell us what we like to hear, but our critics tell us what we need to know. Therefore, a blank should be provided every patient on entry inviting comments and constructive criticism and it is surprising how many patients will transmit their reactions and suggestions to the administration by this means. An envelope addressed to the administrator should be supplied so the completed blank may be transmitted as a confidential communication, or be mailed after the patient has left the hospital. Many valuable hints result, and from time to time merited criticisms of the service. More often than not they are complimentary and, while not designed for this purpose, as such they prove to be a source of satisfaction. All such communications should be acknowledged, in person if the patient has not been dismissed from the hospital, or by letter if he has.

Rates and charges—Financial matters are an ever present source of misunderstanding and may easily give rise to ill will. Staff physicians can be of great help to the hospital by being conversant with the various charges and thus prepare the patient for what he may expect. Encourage the staff to do this but be sure their information is authentic for if the calculation is low the patient will wish the bill held to the doctor's estimate. Such arrangements as are made follow-

ing entry should be with a responsible relative or friend if the patient is too ill for such matters. The hospital representative should be tactful but firm and businesslike. He should be instructed never to attempt to sell accommodations that are obviously beyond the patient's means. The so-called nuisance charges are a source of irritation and the per diem rate should be designed to include all ordinary drugs and dressings. It is a good plan to have a card attached inside the door of every room plainly stating the rate for that room and just what services are included.

One final admonition before we leave the question of patient good will. It is extremely difficult to clear up misunderstandings after the patient has left the hospital. If such have occurred leave no stone unturned in an effort to rectify them before dismissal so you can see him to the door with the same attitude you would assume toward a guest leaving your own home.

General Public

Visitors—Developing good will on the part of the general public presents a totally different problem from the one we have just been considering. Heretofore we have had the benefit of actual contact with those whose good will we were seeking, whereas we are now faced with the necessity of indirect methods in most instances. The one direct contact we have is with the visitor and we can do no less than treat him with the same courtesy and consideration we would wish extended to ourselves were we in a like situation. The fact that relatives and friends of patients are so often hypercritical makes tact and diplomacy at the information desk highly essential. Their questions must be graciously answered and inquiries concerning a patient's condition should be referred to someone professionally qualified to give authentic information.

Telephone Courtesy—Telephone courtesy is of the greatest importance and must receive emphasis for, while an indirect contact, it is fundamentally a personal service. All hospital personnel should be encouraged to cultivate a telephone voice that carries a tone of cheerfulness, warmth, and sympathetic interest to whomever they may be connected. All calls should be answered promptly and should there be any delay in completing incoming calls the operator should supervise at fifteen to thirty second intervals for it is very exasperating to experience a seemingly endless wait on an apparently dead telephone connection.

News releases—An unfortunate news release can be extremely harmful to a hospital and it is therefore essential that we maintain cordial relations with the press. It is far better to give them the entire story, with the request that our confidence be respected, than to try to hide facts that they are almost certain to learn eventually.

Whenever a question arises involving the condition of a patient it would be best to follow the code for uniform procedure as approved by the Public Education Committee of the American Hospital Association, while at the same time explaining why we must be circumspect in such matters. If a friendly relationship is built up the press will usually check with us before publishing items that would reflect on the institution.

It would seem wholly unnecessary to point out that the need for public good will is more important to us at this time than at any period in our past. We can only hope that it is already firmly established for in the public mind the accusations that have been leveled at the American Medical Association by the Department of Justice are bound to reflect on us as a natural corollary to the close alliance of our respective activities. What the public does not know is that the so-called "restraint of trade" referred to in the indictment was no more than the carrying out of a policy originally designed for their own protection. We cannot discuss here the pros and cons of denying a physician membership in a medical society because of his economic theories, but what we must give thought to is the question of whether or not a hospital is to be denied the right to choose the members of its own staff. Apparently such is the plan and we may find ourselves in the paradoxical position of being held responsible for the acts of a physician in whose selection we could play no part. These facts should be brought to the attention of the public through the utilization of every means at our command with a view to gaining their support against a situation potentially dangerous to them.

Ostensibly we are living in a democracy and if democratic principles still maintain it will be the public who will finally decide the type of periodic health payment plan it desires and what agency is to guide its destiny. Is it to be under governmental control with politicians and impractical theorists dictating the policies, or under the direction of physicians and hospitals where it has always resided and where it still rightfully belongs? Time alone will tell, but in the interim we cannot be idle. It is up to us to get solidly behind the plan whereby the medical profession is marshaling its forces to provide the care considered so essential by the National Health Conference, a plan the ultimate success of which depends to a great extent on the good will of the public.

Voluntary Hospitals and the National Health Program

JOSEPH W. MOUNTIN, M.D.

DURING three days of last July a group of approximately 200 persons representing the interests of various elements in our national life met at Washington to hear and consider a series of proposals for improving the general level of health of the American people. These proposals, five in number, were formulated by the Technical Committee on Medical Care, operating under the auspices of the Interdepartmental Committee to Coordinate Health and Welfare Activities. The assembly to which reference is made is commonly spoken of as the National Health Conference, and the five recommendations of the Technical Committee on Medical Care constitute the so-called National Health Program. The proposed program follows in general the administrative pattern of the Social Security Act in that each state will determine and operate the service for its citizens, while the Federal Government is to render technical advice, and, by means of variable grants in financial aid, will smooth out some of the differences in opportunities for health that now exist among the several states.

Five Recommendations of the Technical Committee on Medical Care

Recommendation I of the Technical Committee is designed to strengthen the basic health organization as exemplified in state and local health departments. In addition to discharging their regular functions more effectively than is possible under present circumstances, these departments will be enabled to carry out enlarged programs for maternal and child health. Special provisions also are made for industrial hygiene and mental health, and for particular categories of preventable morbidity and mortality, including cancer, tuberculosis, pneumonia, malaria, and the venereal diseases. Assistance with the construction of hospitals and health centers is provided under Recommendation II. Recommendation III covers medical care for needy persons; while under Recommendation IV are contemplated programs of medical care that include persons above the subsistence level. Insurance against wage loss due to temporary disability is the purpose of Recommendation V.

Presented before the Seventeenth Annual Meeting of the New England Hospital Association, Boston, Massachusetts, March 9, 1939.

The Author

● **Dr. Joseph W. Mountin, United States Public Health Service, is a Member of the Technical Committee on Medical Care of the Interdepartmental Committee to Coordinate Health and Welfare Activities.**

Persons concerned with hospitals have a particular interest in the first four of these proposals. While grants for construction and for the support of added hospital facilities during the first three years of their operation are specifically set forth in the second proposal, payment for care of patients through the use of existing institutions is implied in proposals I, III, and IV.

Voluntary Hospitals Occupy a Strategic Position

The program as a whole makes provision for added public facilities and for further utilization of governmental and nongovernmental hospitals in the three medical types, general, tuberculosis, and mental; but on this occasion discussion will be limited to general hospitals. This element of the program has been chosen for presentation because of its more immediate interest and in order that the paper may be held within reasonable limits. Also a valid reason for exclusion of other medical types is the fact that in comparison with the total value of tuberculosis hospitals, the investment of voluntary agencies is relatively small; in mental institutions the proportionate investment by voluntary agencies is even less. On the other hand religious bodies, nonprofit corporations, and proprietary interests operate over 80 per cent of general hospitals registered by the American Medical Association; these hospitals contain about 65 per cent of the beds and furnish about 60 per cent of the days of care reported by general hospitals in the registered group. By the nature of their geographic distribution voluntary hospitals occupy a very strategic position: Among the 1,737 counties which in 1938 reported the presence of local registered hospitals, 519 listed only proprietary institutions; 786 were served by nonprofit hospitals alone or in conjunction with those proprietorially owned; while only 432 counties contained tax-supported facilities.[1]

Service in Voluntary Hospitals

Another measure of importance is the value of plant assets represented in voluntary hospitals; this is estimated at $1,483,000,000 or about 70 per cent of the total for all general hospitals. Over and above these values that are expressed in actual buildings, grounds, and equipment, this group of institutions possesses endowments somewhere approaching a half billion dollars. Obviously any national health program that includes medical care must, if for no other reasons than efficiency and economy, make some provision for utilizing a going organization of such magnitude and ramification. Furthermore, nonprofit and proprietary hospitals afford the only facilities available in many communities, especially those removed from centers of population. Another value to be conserved is the high standards of service that characterize hospitals of this country; this may be attributed in very large part to the ideals and the freedom of action peculiar to the better hospitals in the voluntary group. It is well to caution, however, that for many persons the term *voluntary hospital* is likely to suggest some large endowed institution affiliated with a center of medical education, or a less prominent though perhaps equally efficient plant sponsored by some nonprofit lay group or religious body. Such hospital gems are usually found in population centers; and these, even when grouped with others of slightly lower standard, furnish accommodations that are accessible only in limited sections of the country. A point worthy of special emphasis is that beyond effective demand, whether expressed by patients admitted or days of care, there is a vast quantity of unmet need which cannot be ignored in any national health program worthy of the name. The question at issue therefore is not whether voluntary hospitals can be utilized in a national health program; rather it is how and where their resources must be supplemented in order that the needs of various groups and classes of the population may be satisfied in reasonable measure.

In planning for the future the first step is to take an account of present assets and deficiencies; especially the latter must be brought into focus since this is the area in which remedial measures must be applied. It is necessary also to have a clear notion of the purposes which hospitals may be expected to serve. First among these functions one might list the traditional one of rendering bed care for the sick; but the system of community facilities should supply such services as are needed by all social and economic groups of the population. The superior equipment commonly associated with hospitals should be available under appropriate terms to all qualified physicians, and to health agencies, both public and private, for the diagnosis and treatment of ambulatory as well as bed patients. Finally the hospital is deficient in a very important respect if it fails to act as a leavening influence on local medical practice; this may be accomplished through staff education and staff discipline, and through opportunities afforded for refined diagnosis and therapy.

Demand Versus Need for Hospital Accommodations

No doubt there are some who wonder at the awakening interest of the Federal Government in community hospitals, and especially they question the necessity for new construction. Their rather quizzical attitude arises very largely from the fact that two terms, *adequacy* and *use*, are interpreted in the light of present effective demand rather than actual need for hospital accommodations. Reasoning from this premise may, and often does, lead to such absurd conclusions as these: Communities are without hospitals because such facilities are not needed; hospital beds are empty because there are no patients to occupy them. Obviously the amount and character of illness should be the criteria used in estimating need for different types of care. A slight variable affecting need for hospitalization is introduced by circumstances within the home. It is, however, a well-known fact that the poor suffer more illness than do persons in better economic positions; and correspondingly that homes of the poor are less adapted to types of care commonly associated with hospital service. The pattern of family life in villages and rural areas may be somewhat better suited to home care of the sick than it is in the large urban centers; but this advantage is offset in great measure by lower family income, deficiency in household equipment, and mileage charges which must be added to physicians' fees. While there may be no essential difference between urban and rural people in their needs for hospital service, the tendency of especially well-qualified physicians to settle in centers of population influences people from the villages and the rural areas to seek hospital care in the larger cities. As local facilities improve in quality and availability, physicians with special training are attracted to cities of the medium and lower population brackets; thus differences in hospitalization rates between communities of various sizes tend to become less apparent. Under the present dispensation, however, some rather

[1] In this connection and throughout the paper, when hospital accommodations are computed in relation to states or local areas, Federal hospitals have been deducted from the gross totals since such hospitals are maintained for designated beneficiaries and therefore are not generally available to the population of their respective localities.

striking contrasts are revealed when the existence and use of facilities are displayed against a common background of need.

In all there are approximately 6,200 places of general service category where sick persons may obtain overnight bed care. Between 1,200 and 1,500 of these institutions fail to meet the requirements for registration laid down by the American Medical Association. Aside from the relatively few that do not desire registration, this group of unregistered hospitals may be considered sub-standard; at best their usefulness is very much limited, and for practical purposes they may be passed over in this discussion of accommodations available in general service hospitals. The registered general hospitals proper contain in all about 460,000 beds; these if related to the population give an average of 3.6 per 1,000 for the country as a whole.

Wide Variation of Available Facilities

The aforementioned general averages mask wide variation in amounts of facilities that are available to the citizens of individual states. At the upper end of the scale are two states having between 5 and 6 beds per 1,000 population. In striking contrast are ten states that report less than 2 beds for the same number of people. Between these extremes is one group of twelve states having from 2 to 3 beds per 1,000 persons; sixteen states afford between 3 and 4 beds per 1,000 persons; and there is another group of nine states where the ratios range between 4 and 5. By disregarding state lines and analyzing the situation from the standpoint of distribution of hospitals according to types of communities, one finds location of hospitals to be associated with areas that represent aggregations of wealth and people. In the 182 counties, where all or more than half the population resided in areas classed as metropolitan in 1930 by the United States Census Bureau, the ratio of beds per 1,000 inhabitants exceeds 4.5. If to these 182 counties were added the tier of counties immediately adjoining, the ratio would still be high, 4.0. Beyond this zone the proportion of facilities to potential patients falls very rapidly. In the United States as a whole slightly more than 1,300 counties are without a registered general hospital. The absence of a hospital does not, for many counties, express a deficiency since satisfactory accommodations may be found within reasonable distance. It is a fact, however, that some 18,000,000 people live in counties without a registered hospital.

The situation just described also may be portrayed on the basis of so-called hospital service areas. This method is particularly applicable for sections where county lines have relatively little true significance. By using as the center a county having 250 or more hospital beds and calculating the facilities in surrounding zones as described by radii of increasing length, the picture is one of progressive decrease in facilities proportionate to the population as the circles grow larger. Perhaps the institutionally minded hospital administrator will say, "The situation you describe is as it should be." To this rejoinder the obvious reply is: If the hospital is to be no more than a place to house patients and equipment for physicians of the immediate vicinity, then location is a matter of little moment, assuming of course that the local profession is sufficiently skilled to man the institution. On the other hand if the hospital is to serve, in a broad sense, the purposes of a health center and as an adjunct to local medical practice, any institution more than 25 miles from its potential beneficiaries is of decreasing value in relation to this concept.

As previously stated, champions of the status quo when extolling the superiority of American hospitals are likely to have in mind the monumental type of institution erected perhaps to the memory of a philanthropist, or some tax-supported medical center associated with a university. Relatively few people realize that 25 per cent of all registered hospitals contain less than 25 beds each. Roughly, another 25 per cent contain between 25 and 50 beds, while only 16 per cent of the hospitals have a bed capacity in excess of 150. With respect to units of less than 25 beds, many students of administration will agree that, for economical operation and good hospital practice, hospitals of such small size should be limited in scope of service and be tributary to some sponsoring institution. Moreover, these small hospitals seldom operate ambulances, very few have clinical laboratories under competent direction, and, suprising as it may seem, a considerable proportion are reported as being without x-ray equipment.

Use of Hospitals by Urban and Rural Groups

During 1937 the admission rate to general hospitals was 66 per 1,000 persons in the total population. For people of the metropolitan counties it was 91. If the first tier counties be added to those of the metropolitan group, the rate still remains high, 81. In the counties beyond, which are largely rural, the rate falls to 44. Since the areas used for this comparison are broad and contain diversified populations, such differences in admission rates as those cited can hardly be explained on the basis of residence. Percentage of births occurring in hospitals is sometimes used in preference to total hospital admissions as a

measure of social consciousness since hospitalized deliveries may be used to represent an elective measure in medical service, while general hospital admissions more often express care that contains a very large emergency element. On this count Hoge found that in 1937 about 44 per cent of all births registered in the United States took place in hospitals, whereas in the sample counties, selected on the basis of being 50 miles or more from any important hospital center, only about 17 per cent of births occurred in hospitals.

Paradoxical as it may seem at first glance, where facilities are fewest they are used the least. In metropolitan and contiguous counties utilization may be expressed as 73 per cent of available bed days; while in those primarily rural, occupancy falls to 60 per cent. When utilization of beds is shown by hospital control, the governmental facilities are, as a rule, used to optimum capacity; in contradistinction those of proprietary ownership show utilization which falls below 50 per cent of the available bed days; while an intermediate position, as expressed by average occupancy of about 60 per cent, is held by the nonprofit group of hospitals.

Willingness of patients to avail themselves of hospital facilities has been suggested as a reason for the well-known difference in the use of hospitals by urban and rural groups. This supposition, however, is not borne out by inspection of their respective expenditures. According to Klem, families having incomes of $3,000 and above when classified according to place of residence as metropolitan communities, small cities, and villages, report average annual expenditures for hospital care as $13.60, $14.50, and $22.50, respectively. The metropolitan families receiving annual incomes within ranges of from $500 to $749, and from $750 to $999 pay annually for hospitalization $1.05 and $2.55; for the small cities the corresponding expenditures are $4.05 and $7.86; while expenditures for hospitalization by village families in the two economic groups are $4.09 and $5.32. In the intermediate income classes payments by metropolitan families are somewhat higher than those of small city and village families.

Financial Structure Important Factor in Use of Hospital Facilities

More important than location or size of a hospital, or even the out-of-pocket expenditures of families, in determining the use of hospital facilities is the supporting financial structure of the hospital. This factor fixes in very great measure the extent to which beds can be placed at the disposal of different groups of the population. Especially is this influence apparent in hospitalization rates reported by the under-privileged groups. On this point an analysis of hospital receipts shows that fees collected directly from patients furnish 70 per cent of the income for nonprofit hospitals, and for the proprietary group more than 90 per cent. Endowments produce about 6 per cent of the revenue for nonprofit hospitals, and those under such control obtain in gifts an amount of perhaps the same magnitude, but receipts from these sources are negligible for the proprietary group. If the total receipts of all hospitals, other than those of the Federal Government, may be taken to represent outlay for local hospital service, the distribution by source becomes 62 per cent from patients, 24 per cent from taxation, and 14 per cent from other channels. This situation varies of course among the individual states and between broad geographic divisions of the country. In eight states patients contribute more than 80 per cent of hospital income, and in twenty-seven states patients furnish more than two-thirds. The patient's share falls below 50 per cent in only two states. These figures on source of hospital income must be considered in connection with the fact that about one-third of the population for the United States falls into either the indigent or the marginal group. When given care in the northeastern and western states, patients contribute a proportionately smaller part of hospital income than they do in either the central or the southern states. One-third of the difference between patient fees and total cost of care is borne in the eastern states by endowment and gift funds, while two-thirds is supplied through taxation. The western states make up the difference almost wholly by taxation. Reports from hospitals situated in metropolitan counties and the counties immediately adjoining disclose receipts from all sources that are equivalent to $4.58 per capita when distributed over the entire population; of this the patient pays $2.60. In the second tier counties and those beyond, hospitals obtain what amounts to $1.62 per capita, $1.24 of which is obtained in the form of patients' fees.

The Hospital as a Health Center

Early in this paper mention was made of the second purpose usually assigned to the hospital, that of providing diagnostic and treatment facilities which may be used alike by practicing physicians and public health agencies. A hospital operating under appropriate arrangements with local practicing physicians and health agencies, according to this plan, would make its x-ray, laboratory, and other equipment available to ambulatory as well as bed patients. Usually some scheme for rendering out-patient service would be entailed although it need not always be a formal

department type of organization. The necessity for pooling resources exists especially in the smaller communities; otherwise both the consumer and the producer may be denied facilities required for efficient and effective service.

Unfortunately the performance to date would indicate that the hospital occupying the role of a health center is very largely a theoretical consideration, and that many hospitals are not likely to develop this feature beyond the hypothetical stage, although an ultimate consummation of the larger purpose is conceded to be highly desirable. Furthermore, most of the steps accomplished in this direction have been taken by the tax-supported and by the endowed hospitals. For example, some 770 hospital out-patient departments were enumerated in a study conducted by the United States Public Health Service in collaboration with the Out-Patient Committee of the American Hospital Association, and practically all of these are located in cities having more than 100,000 population.

Out-patient departments sponsored by nonprofit hospitals are more numerous and render a greater volume of service than those sponsored by state and local governments; but in relation to their numbers, performance of the government-sponsored facilities is higher whether this performance be based on the proportion of hospitals having out-patient departments or on the number of patient visits per department. The few organizations for out-patient service found in smaller cities are usually attached to university hospitals. To the service rendered by organized out-patient departments should be added an indeterminate but significant amount rendered to ambulatory patients by many hospitals under less formal arrangement. A large percentage of this unorganized service for ambulatory cases appears to rise out of the accident work and post-operative dressings.

In the case of proprietary hospitals the reported ambulatory service is generally indistinguishable from the office practice of the staff physicians. Ambulatory service furnished under these several arrangements is usually carried out without any very definite and integrated plan of operation with the health agencies of the communities concerned. This lack of working arrangement is not cited to discount the contribution of hospitals towards improvement of public health, but rather to illustrate the possibilities of more effective action.

The Hospital as a Means of Professional Advancement for Community Physicians

The last function assigned to a hospital, that of promoting professional advancement for the practicing physicians of the community, is less tangible than the two previously mentioned. The hospital, too, may through its staff organization exercise an unobtrusive type of discipline over local medical practice without necessarily becoming an instrument for supporting particular social doctrines or professional groups. There is no gainsaying the fact that all too often the hospital is little more than the workshop for a very small percentage of the physicians who have proprietary rights or staff privileges in the only facilities that are available. The remaining physicians derive little or no benefit from what are often presumed to be community institutions; at the same time their patients are deprived of whatever benefits may accrue from continuity in physician-patient relationship.

Considering the Type of Control

Another aspect of hospital organization which cannot be ignored when considering any extension of hospital service or responsibility is the present scheme of ownership, commonly spoken of as control. Aside from the limited facilities operated by the Federal Government, 55 per cent of the hospitals and 63 per cent of the beds are controlled by nonprofit corporations; proprietary agencies figure as operating agencies to the extent of 32 per cent of the hospitals and 11 per cent of the beds; while state and local governments operate 13 per cent of the hospitals containing 26 per cent of the beds.

Institutions of state and local governments for the most part are large and serve primarily the centers of population. Voluntary hospitals, too, are numerous in large urban centers, but the presence of tax-supported institutions tends to release the nongovernmental group from immediate responsibility for serving an undue proportion of the dependent and very-low-income segments of the population. Voluntary hospitals of the smaller communities on the other hand are expected to care for all groups of the population, often without the aid of regular appropriation from tax funds. Where those circumstances prevail, service to the underprivileged may be curtailed since the hospitals of the smaller communities usually operate on limited funds with little or no margin over current expenses.

Having in mind the foregoing facts with respect to the existing scheme of hospital organization in this country and the needs of the people, we may resume consideration of the implications contained in the recommendations of the Technical Committee on Medical Care.

Implications Contained in the Recommendations

Implied in Recommendations I, III, and IV

which deal with grants-in-aid for medical care is the understanding that existing facilities will be utilized wherever it is feasible to do so. This principle of course will give rise to questions concerning the cost of service and standards of care. Obviously a governmental agency should not be expected, nor could it continue indefinitely, to purchase a service that it can provide more cheaply through public facilities. Comparative costs, however, should take into account investment, interest, repairs, and other fixed charges as well as relative standards of care. Public ownership, however, need not preclude local governments from appointing private agencies to operate publicly owned institutions. This delegation of responsibility should not become a subterfuge whereby a public facility is converted into a private enterprise with consequent restriction of service.

The next point likely to be in issue is that of standards. Even the very simple requirements of the American Medical Association for registration result in deletion from the total of approximately 1,500 hospitals; these institutions still continue to give some measure of care and many are regarded as bona fide hospitals in their respective localities. Standards such as those specified for approval by the American College of Surgeons reduces even the registered group by nearly one-half. True, this reduction arises in considerable measure from the fact that the College does not grade hospitals of less than 25 beds. If to requirements that pertain to internal organization and operation were added still more based on community relationships, not a few otherwise satisfactory hospitals would have difficulty in meeting the combined standards.

Definite Situations Which Must Influence Course of Action

This general discussion might continue since there are many aspects of need and policy which could be inspected. Suffice it to say, however, that agencies now rendering service and administrators who may be charged with public responsibility will be faced with definite situations which must influence their course of action. A few of these are posed, not for answer, but to stimulate realistic thinking: In how many communities are existing hospitals prepared to satisfy the needs of the people irrespective of the patient's ability to pay for such service? To what extent are facilities open to qualified physicians who may wish hospital connections? Do ambulatory patients participate in the improvement of diagnosis and therapy that should result from the use of hospital equipment? Do hospitals take their appropriate part in the organized community program for public health?

Providing Means of Meeting Cost of Hospitalization for Indigents and Low-Income Groups

Even the most ardent advocate of the voluntary hospital would perhaps agree that government should assume some responsibility for patients who can pay very little or nothing at all towards meeting their hospital bills. Under Recommendation III of the National Health Program, it is proposed that Governments (Federal, state, and local) contribute funds which will assure at least a specified minimum amount of hospital care for approximately 40,000,000 people who constitute the wholly dependent and very-low-income groups of the population. In many communities the voluntary hospitals are expected to bear the charity load, and no consideration is given as to how the hospitals may obtain the necessary funds. Without endowment or community contributions in some other form, the hospital has no recourse but to exclude nonpaying patients or limit the intake to a number whose expense will not exceed whatever reserve may be accumulated through collections from revenue patients.

Once the nonpaying patients have been taken care of by taxation, voluntary hospitals should be in position to reduce rates and thus accommodate moderately-low-income groups. Through the device of insurance, hospital costs may be distributed over time and through groups of the population and thus bring facilities within the reach of people who occupy still lower income brackets. At present more than 3,000,000 people are said to have arranged for paying hospital bills through such voluntary insurance plans. This number represents a growth that has taken place within the past few years, and some enthusiasts envision these hospital service plans covering as many as 25,000,000 people.

Before reaching the conclusion that the panacea for all economic problems arising out of illness may be found in hospital pre-payment plans, it would be well to bear in mind certain points with respect to their inherent limitations and absence of demonstrated ability. Hospitalization accounts for less than 15 per cent of the total cost of medical care. The feasibility of incorporating physicians' services into hospital insurance plans remains to be demonstrated on a wide scale basis. The greatest deficiency of hospital care is to be found in rural areas, whereas insurance techniques are not well adapted to agricultural people and self-employed persons generally. At present voluntary hospitals do not have the formal type of organization for accepting administrative and fiscal responsibilities that one might expect of an agency which presumes to enter a field like social insurance that would necessitate covering persons

who have very little or no income as well as the self-sustaining members of the population. Because of the factors just enumerated and other limitations in the financial and organizational structure of hospitals in the voluntary class, it appeared to the Technical Committee that elements of tax support and public control must be integral parts of any feasible plan for extending hospital care, especially to the 40,000,000 persons who at best can meet only a small part, if any, of their bills. Some states may choose to increase the coverage so as to include portions of the self-sustaining population and to defray the cost through taxation or insurance contributions or a combination of the two methods. Health insurance, be it understood, is primarily a method of raising revenue and need not alter the present system of making payments to private physicians and hospitals for the respective items of medical care.

Conclusion

If one may judge from rates of utilization of hospital accommodations, it would appear that beds to be supported by paying patients are now available in excess of the revenue to be derived from that source. Barring a significant increase in the national income and a more even distribution thereof, it is safe to assume that most of the necessity for further hospital construction will arise largely through the circumstance of there being made available, from sources other than patients' fees, additional funds for meeting hospital costs. Still another factor likely to remain operative in rural areas is the scarcity of surplus wealth which might be bequeathed for the erection of voluntary hospitals and their endowment to such an extent as will maintain free and part-pay beds in proportion to the size of different economic groups of the population. Account must be taken also of a growing tendency among persons to regard medical service as a right of citizenship rather than the outcome of a charitable impulse.

Because of many and varied circumstances, only a few of which have been mentioned, the presence of government in the fields of general hospital construction and support may be expected. This situation has been recognized by the Technical Committee on Medical Care, and its recommendations have been so phrased as to direct this newcomer into regions and types of service that are complementary to facilities already in existence and to others that may be established. In elaborating on its formal recommendations, the Committee specified that programs should develop under state auspices with no more than technical guidance and financial assistance from the Federal authority. If the recommendations of the Technical Committee are enacted into legislation, each state desiring financial assistance must present to the Federal authority a comprehensive plan of hospitalization covering such points as: Location and character of existing hospitals and conditions under which accommodations are available; nature and purposes of such additional facilities as are proposed for grants-in-aid; amount of financial participation by the state and the locality; means for assuring continuing support and proper utilization of the units to be added. By imposing on the administrator conditions of this character, reasonable assurance can be given that sums appropriated by the Federal Government will be available for the purchase of care in hospitals of acceptable standards, and that new construction of public hospitals will be geared to actual need for added facilities.

BIBLIOGRAPHY

Falk, I. S., Rorem, C. Rufus, and Ring, Martha D.: The Costs of Medical Care. University of Chicago Press, Chicago, Illinois, Jan. 1933

Mills, Alden B. and Patsy: The Need for More Hospitals in Rural Areas, *Modern Hospital*, Vol. 44, No. 3, March 1935

Plumley, Margaret L.: Location and Characteristics of 769 Out-Patient Departments, *HOSPITALS*, Vol. 11, No. 12, Dec. 1937

Hospital Service in the United States, *Journal of the American Medical Association*, Vol. 110, No. 13, March 26, 1938

Proceedings, National Health Conference, July 18. 19, 20, 1938. Government Printing Office, Washington, D. C.

Mountin, Joseph W., Pennell, Elliott H., and Flook, Evelyn: Hospital Facilities in the United States—I. Selected Characteristics of Hospital Facilities in 1936, Public Health Bulletin 243. Government Printing Office, Washington, D. C., Sept. 1938

Hoge, Vane M.: Rural Hospital Needs, *HOSPITALS*, Vol. 12, No. 11, Nov. 1938

Reed, Louis S.: Hospital Care Insurance and Social Security, *HOSPITALS*, Vol. 13, No. 2, Feb. 1939

Klem, Margaret C.: Family Outlay for Hospital Care, *Modern Hospital*, Vol. 52, No. 2, Feb. 1939

Pennell, Elliott H., Mountin, Joseph W., and Pearson, Kay: Business Census of Hospitals, 1935. In press, Government Printing Office, Washington, D. C.

NATIONAL HOSPITAL DAY
MAY 12

A Medical Plan for All the People

CARL F. VOHS, M.D.

The Author

● Dr. Carl F. Vohs is Chairman of Medical Economics, Missouri State Medical Association, St. Louis, Missouri.

IN recent years, the world we live in has been engaged in an ecstasy of vast and lofty planning. Certain changes or trends under way in the last few years, and accentuated in the present turmoil involving capital, labor, and government will have a definite bearing upon the medical profession and hospitals in this country. If the medical profession and hospitals are not ever alert, they will be given by Capital and the Government, to Labor as political peace offerings and the history of Germany under Bismarck and the history of England under Lloyd George will repeat itself in America. The history of medicine in these two countries demonstrates in no uncertain terms the defects and abuses of political machination.

The future and safety of medicine and voluntary hospitals lie in an association that will be tightly defined, highly disciplined, restricted in personnel, better protected, and more efficient. The control must not be governmental but must be professional and internal. Missouri is well on its way to such understanding between the hospitals and the medical profession.

For the Social Security program of the present national administration, including its larger aspects of compulsory health insurance of American wage workers and low salaried wage earners, European precedents are relied upon for guidance. Once such a system becomes established it is next to impossible to repeal it or bring about profound modifications. The medical profession would be divided into two classes, those practicing state insurance and those who continue under a system of free competition in private practice. There would be a poor man's doctor and a rich man's doctor, a comparison which will at once be odious to both the American public and the American physician. It is fundamentally opposed to our American conceptions of life and democracy. It is definitely European in its concepts.

Socio-health Movement

It was a little more than five years ago that the Missouri State Medical Association began to study the socio-health movement in this country and the accomplishments of similar movements in European countries. We learned that sociologists believe that health is essentially a social problem, emphasizing that it is a fact that to care for the sick and to promote health are broadly considered social rather than medical problems in the narrow sense of the word. They believe, "While it is true that selected phases of health work must, by their very nature, be carried on by such technically trained persons as physicians, surgeons, nurses, and the like, it is equally true that the development of their services, their mode and point of attack, the direction and emphasis of their work, are essentially problems of social policy, social understanding, and social organization." There seems to be a general tendency to put the cart before the horse with the sociologists in the driver's seat. After a complete study of the social planning in Europe as exemplified in compulsory health insurance, organized medicine has come to the conclusion that it must lead in social understanding and social organization in medical matters.

The present methods of providing medical services, of paying for them, of utilizing social service personnel, of financing, constructing and operating hospitals, of carrying out public health activities, and of educating practitioners, in short, the whole group of arrangements and devices through which the science of medical knowledge is translated into services is a result of generations of growth. No one person and no one group of persons planned the present conditions nor can be held responsible for them. They are not the creation of medical men alone but of physicians, hospital trustees and superintendents, health officers, educators, philanthropists, industrial employees and employers, and government officials. All have contributed their share in the creation of the chaotic picture that presents itself to us today. Our obligations are mutual and the solution of our problems must be upon a mutual basis.

Group Hospitalization

No development in the field of medical economics, with the exception perhaps of sickness insurance and state medicine, has aroused more

Presented at the Missouri Hospital Association Convention, Columbia, Missouri, February 7, 1939

interest and discussion than has group hospitalization or pre-payment plans for hospital care.

During the recent economic depression, hospital income from endowment and voluntary contributions was decreased by about two-thirds, the charity load was increased almost fourfold and large obligations growing out of capital investment or fixed costs were not met.

Under such existing conditions it was only natural that superintendents, lay boards of hospitals, and in some instances the medical profession, should seek some method whereby the major items of illness costs might be more conveniently met by the great mass of American people. The method chosen by a great many communities was the pre-payment plan known as group hospitalization. Much credit is due the little group of pioneers at Baylor University in Texas who had the courage to bring forth, in the face of many obstacles, an untried plan; other cities and communities capitalized on the experience of the early years of operation and have added to the stability, efficiency, and increased confidence in the plans as they are presented to the people today. There seems to be little doubt that under proper administration and organized on certain principles, group hospitalization will meet with the approval of all concerned. For many years there has been serious discussion among physicians and hospital administrators concerning the most equitable arrangement for anesthesia, clinical pathology, raiology, and other special medical services in hospitals. If group hospitalization plans show a distinct tendency to place hospitals in the field of medical practice they cannot expect the support of organized medicine. Plans confining their benefits strictly to hospital facilities or to those services acceptable to the local medical society would avoid any undesirable disturbances in the field of medical practice and would not impair the value of the plan as a method of assisting persons with limited incomes to receive good hospital care.

Group hospitalization has had an auspicious start and the medical profession, together with the community in general, expects and hopes to receive much good in the future, but unfortunately, there are and will be limitations. There still will have to be a medical economics plan which will increase the possibility of medical, dental, and hospital care for all people, regardless of their income status.

It may be some time before group hospital service plans can safely work out a method to enroll practically all those desiring such protection. It is obvious that administrative costs and adverse selection are major reasons which preclude the extension of this service to individuals, and not just through groups at their place of employment. The medical societies throughout our land have been experimenting for years to develop a thoroughly ethical and sound method whereby those in the limited and low income bracket might be better served in matters relating to health.

Hospital service plans can and might be an important factor in aiding the development of plans to provide medical and dental care which will not violate nor disturb the relationship between doctor and patient. It is an admitted fact that hospital service plans, as a rule, do not reach those of very low income, and certainly not the indigent.

Group hospitalization might eventually be part of a well coordinated program which would arrange for the payment of medical, dental, and hospital bills on a post-payment basis for those lacking membership in the service plan. In communities where there are a number of hospitals supported by a local community chest, it will likewise prove practical to coordinate their admitting service. A number of large cities have already placed this plan in effect and with very satisfactory results. For this to be brought about will call for real community cooperation; the natural selfishness of individual institutions must be subjugated to the best interest of the community at large. The formation of community chests was a forward step in conserving the resources for community help which were contributed by thousands of wage earners to aid those less fortunate than themselves. Therefore, a coordination of existing resources is far more desirable and unquestionably more practical, than the establishment of any new and unworked scheme for the provision of better medical services and better hospital care to our people.

The one outstanding problem before the medical profession today from the standpoint of the curative treatment of disease is the development of an adequate medical service for all persons, and at a cost which can be met by them in their respective stations in life. It is in answer to this problem that the Health Security Administration of the State of Missouri is being planned and developed.

Health Security Administration of the State of Missouri

Following the survey that is being made of the medical and hospital needs of the state, the state is to be divided into economic units. Each unit will support in a coordinated program

1 A Group Hospital Plan

2 A Medical-Dental Service Bureau
3 A Central Registration Bureau

Representatives from the boards of management of each of these bureaus will make up the Health Security Administration of the economic unit. A representative from each Health Security Administration will sit on a state board to be known as the Health Security Administration of the State of Missouri.

It is planned that this Health Security Administration of the State of Missouri will be in control of all plans and monies established by Federal grants-in-aid. It will have the right to assist local economic units in the building of needed hospitals and clinics from state and Federal funds.

The respective local boards are made up of medical men, dentists, hospital representatives, and the public. If we must have a National Health Program such an administration could handle it most safely and most sanely and would meet all the requirements of the Technical Committee in its suggestions and plans for a unified system of state health.

Groups Classified According to Ability to Pay for Health Service

We have divided the people into four classes. The upper 25 per cent of the people can pay for all medical, dental, and hospital care at all times. The second 25 per cent can with some assistance pay reasonable fees for health care. For this group we have arranged the Medical-Dental Service Bureau for the post-payment of their medical, dental, and hospital bills. These bills are to be liquidated in a year's time. For this group we also have inaugurated group hospitalization which at a cost of 75 cents per month per individual, $1.25 per month for husband and wife, and a maximum of $1.50 a month for any sized family, pays for thirty days a year for each of them in any of our hospitals. If they stay longer than thirty days, one-third of the bill for six months is paid. The average stay in the last three years has been 8.5 days.

For the third group of 25 per cent of our population, the two bureaus are of great service. Group hospitalization will take care of their hospital liability, and their medical and dental bills must be scaled down to meet their ability to pay. For the lower strata of this group, which of course varies greatly in number in direct ratio to our depressions and recessions, the third bureau, the Central Registration Bureau is intended. The patient will pay what little he can for his hospitalization, if he is not a member of group hospital service, and the balance is to be paid out of United Charity funds at an agreed per diem cost. The medical care after proper investigation of these patients will be given gratis by the medical profession. It is hoped after the indigent load of the community has been definitely established by the Central Registration Bureau, to work out a pre-payment plan for medical and dental care for this whole group.

Medical Care for Indigents

The last group of 25 per cent of our population will always be the responsibility of the community and their care should be paid for on a per diem basis by the United Charities as they are vouched for by the Central Registration Bureau. If the funds of the United Charities are not sufficient to liquidate this liability, the city, state, and national tax funds must subsidize the program. This will fit in well with the National Health Program.

If the medical and dental burden for the care of this group becomes too great, then plans like the Los Angeles County Plan and the Oakland (Michigan) Plan will be instituted. These plans pay for the care, medical, dental, etc., out of tax funds. Again we can use Federal grants-in-aid. It is a state system establishing and meeting all the needs of all counties in the state; it is voluntary in every respect and with no political control.

Development of a Pre-payment Medical Plan

The next step in the completion of this program is the development of a pre-payment medical plan. The State Committee on Medical Economics met in Jefferson City on December 11, 1937, and agreed upon the following pertinent data:

1 The plan is to be on a service basis, nonprofit, and is to be known as "group medical service." The main objective should be complete coverage with as little exception and deductibility as possible. The plan here presented will become an integral part of the Missouri Plan and will be based upon the economic unit of service proposed by that plan. It seeks to adopt the principle of all budgeting devices, viz., to spread the cost of unpredictable hazards over a large group at a predictable rate suited to the incomes of the participants of the plan. It seeks to offer a method of accomplishing the purpose as a civic enterprise in similar fashion to Group Hospital Service, Inc., and to utilize the medical resources of the community as they exist or as they may become, in the manner to which the community is accustomed.

2 The control should be vested entirely in the State Medical Association through a board of trustees representing the membership on a numerical basis. An advisory committee made up of professional and lay individuals shall be formed in each economic unit.

3 Taking into consideration the economic phases existing in the state, the Committee felt that the population can be divided into three main groups.

Group A. People living in metropolitan areas like St. Louis and Kansas City. Membership is to be available only to families with a maximum income per annum of:

$1,800 gross income for entire family, premium rate $3 per month
$1,800 gross income for man and wife, premium rate $2.50 per month
$1,200 gross income for individual, premium rate $2 per month
(Dependents are unmarried children under 18 years of age living at home)

Group B. People living in urban areas of from 5,000 to 100,000 with maximum incomes per annum of:

$1,200 gross income per entire family, premium rate $2 per month
$1,200 gross income for man and wife, premium rate $2 per month
$1,000 gross income for individual, premium rate $1.50 per month
(Dependents as in A)

Group C. People living in rural areas with maximum income per annum of:

$800 gross income for family, premium rate $1.50 per month
$800 gross income for man and wife, premium rate $1.50 per month
$800 gross income for individual, premium rate $1.50 per month

4 Consistent with "free choice of physician" all doctors licensed to practice medicine and acceptible to the committee on ethics and censors in each county medical society should be permitted to volunteer to serve the plan. Negro physicians must be members of the National Medical Association (No other control possible). Ethics committees and censors of each county medical society must consider punitive action in any cases of abuse, by physician or patient, and refer information for decision and disposal to the medical trustees. Since this type of pre-payment medical service is to be placed upon a group basis in the main, the groups will be held responsible for abuses by its individual members and in turn the group can make complaints to the medical Board of Trustees as to medical service rendered.

5 The plan should be made available according to basic enrollment procedure of Group Hospital Service but option should be given to take either or both of the plans.

6 Administrative machinery. Economic acquisition can be made by utilizing field secretaries of group hospital service. Before distribution and proration of funds 20 per cent should be retained by Health Security, Inc., 10 per cent for reserve (for protection in epidemics, prolonged cases, maternity care, chronic cases), and 10 per cent for administration. A possible method of financing which has the added advantage of a check on abuse would be to withhold $100 in service fees on each participating physician, this amount or remaining part thereof to be paid to the physician or his estate when his contract with the Association is ended for any reason.

7 Medical services are to be paid for out of available pooled funds on the "unit system." The unit system has been selected because no other method will insure against insolvency or bankruptcy and because it is evidence to the public of the good faith of the medical profession during the developmental period of this plan.

8 Beneficiary membership in the plan is to be open to all Missouri inhabitants falling within the restricted income groups as rapidly as arrangements can be made therefor.

9 The scope of medical service contemplated is to include everything except industrial injuries (Workmen's Compensation cases, etc.), accidents covered by other types of insurance held by the insured in this plan or by a responsible agent, or illness arising from acute alcoholism and drug addiction. Monthly limits of service are to be placed upon the care of chronic illness developed after patient has been in the plan six months, as deemed advisable by the Board of Control.

10 Participation of physicians shall be upon a voluntary basis and upon the signing of an agreement with full acceptance of all medical responsibility. In no way can the county medical society be held responsible. It acts merely as the agent in similar fashion as in Group Hospital Service, Inc. The plan will not be started until at least 60 per cent or more of the eligible doctors of medicine have volunteered to serve.

Treatment of patients and non-acceptance of patients by doctors shall be on the basis of gen-

erally accepted precepts of the ethical practice of medicine.

11 Roentgen ray, anesthesia (major and minor), clinical pathology, physiotherapy, and hydrotherapy for hospitalized patients will be paid for with definite restrictions on a cash indemnity basis as it may be developed through cooperation with the Board of Trustees of Group Hospital Service, Inc. Private patients will receive this care in the respective offices of member physicians, or as out-patients of these physicians in hospitals, in accordance with the system of compensation and restrictions developed by the plan. Every individual enrolling in the plan shall be considered a private patient.

12 The general attitude of the profession must be cooperative and not competitive.

13 The public must be educated to understand that any plans developed by the medical profession are with the desire to furnish the best of medical and hospital care. Any abuse on the part of the public will not only jeopardize these plans but also the American type of medicine which statistics have proven to be the best in the world today.

In conclusion may I point out that the swift, quiet growth of pre-payment plans, both medical and hospital, presages a truly American type of medical practice in the United States? The Missouri Plan for the medical care of all the people is based upon community needs, is to be developed and paid for by the community, aided, if need be, by local, county, state, and Federal funds. It protects the individual autonomy of our private institutions and the personal relationship between physician and patient.

Diesel Engines in Hospitals

The peculiarities of the power and heating load in hospitals are such that they are able to manufacture their own electricity as a by-product of heating the hospital during the heating season. During this heating season the cost of manufacturing their own current is but a fraction of its cost if purchased from a public utility company. But, due to the necessity of insuring against power failure, it has heretofore been deemed necessary to maintain a "standby" connection from the public utility company. The cost of this standby service has been such as to make serious inroads on the savings gained by manufactured power.

If the hospital continued manufacturing its own power during the "heat off" summer months, the exhaust from the generator engines exceeded the hospital's needs for steam for water heating, etc., so much that it was necessary to waste as much as one-third of the exhaust steam to the air.

The use of Diesel engines as a source of power for driving the generators, both in an emergency and during the "heat off" season has been canvassed repeatedly by certain power-minded administrators, but until recently did not offer a solution both because the diesel units were not manufactured in units small enough to suit the hospital's needs, and because the first cost was so great that the four or five months' use needed did not seem to justify the investment.

Recent developments in diesel design have resulted in a twenty horsepower unit manufactured on a production basis, and therefore at a cost that justifies its installation in hospitals of 150 beds or more. These 20 units that either a single unit or two or more in tandem may be installed, depending on the needs of the individual institution. Such an installation can be used for generation of all the current used in the summer season and likewise serves as a "standing" unit capable of being put in service in a few minutes at any time the primary source of power should fail.

By such a combined installation of steam and diesel power production, the power plant becomes independent of both the cost and hazard of failure of outside power, and at a cost materially less than has before been possible.

Oxygen Therapy Equipment—Current Practices

A knowledge of the mechanical aspects of administering oxygen for therapeutic uses is of high importance today. All who participate in the administration of oxygen therapy in hospitals should be constantly in contact with the latest information.

A most constructive contribution to the literature on this subject is a forty-four page booklet issued recently by The Linde Air Products Company, 30 East 42nd Street, New York City. It is the revised edition of "Handbook of Current Practices in Operating Oxygen Therapy Equipment." A convenient, authoritative reference upon which the Linde people are to be congratulated. They will gladly send you a copy.

Doctors, Surgeons, and Hospital Superintendents Cooperate in the Treatment of Diabetes

ELLIOTT P. JOSLIN, M.D.

THE invitation to physicians to take part in the New England Hospital Meeting is significant. It shows cooperation already exists in New England between doctors, surgeons, and the administrators of hospitals. You are doubtless aware that this happy situation is not universal in the United States and that although a woman, who has an urge to have her baby in a hospital between noon on Saturday and 9 a. m. on Monday, can receive all necessary care, the doctors treating a poor diabetic in diabetic coma may lack the vitally necessary help of the hospital laboratory. However, as you know, in Boston day or night, Saturdays, Sundays and holidays, the superintendents of hospitals have placed the facilities of their laboratories not only at the disposal of doctors on their staffs, but have made them available to physicians without hospital connections.

Cooperation between doctors, surgeons, and hospital superintendents in the treatment of diabetes saves labor and expense for all concerned, but what is of far more importance, cooperation provides infinitely better care for the patient and at far less cost both to him and the hospital.

The subjects which I will discuss to illustrate these points are, first, the relation of all our groups to hospital laboratories; second, the present type of diabetic hospital population; third, problems of treatment associated with the diet of diabetics; fourth, the rôle played by exercise and by insulin; fifth, the value of the pharmacy store; and, sixth, a few remarks upon the value from all points of view of teaching and research.

Laboratory Work in Diabetes

The increase in the amount of laboratory work for diabetes has been tremendous and will go on. Although only a part of the laboratory work at the New England Deaconess Hospital is connected with diabetes, the total number of laboratory tests performed last year was 135,935 as compared with ten years ago, when the figure was 57,022. Moreover, the total number of tests in the treatment of diabetes is likely to increase still further and quite as rapidly as in the last few years. Therefore, in any provision for laboratories in a modern hospital one must plan for this expansion and bigger and better laboratories will be required.

This greater amount of money expended upon laboratories, however, by no means indicates that the hospital cost of treatment of the diabetic is rising. In less than a generation ago my diabetic patients remained in the hospital, on the average of a month or more; today I am sure the average for the non-surgical diabetics is not far from a week and if we include the surgical diabetics in the total average, I doubt if it reaches much above ten days and surely not more than fourteen days. In other words, improved methods have lowered the total cost per patient.

Promptness in Reporting Tests

Laboratory reports in a modern diabetic clinic now reach the visiting physician or surgeon between eight and nine o'clock each morning so that at his visit advantage of these can be taken in arranging for the treatment that same day. It is not long ago that such reports only gradually filtered from the laboratory to the ward and arrived too late to make possible changes in treatment until the following morning. Promptness in reporting tests saves many days of hospital stay in the treatment of the diabetic clientêle. To bring this about, Dr. Cook, our superintendent at the New England Deaconess Hospital, has arranged that the student house-officers work between 6:30 a. m. and 8:00 a. m. and thereby furnish for all the staff the qualitative and quantitative analyses for sugar in the urine and thereby the diet of the patient for that same day can be adjusted and appropriate changes promptly arranged.

The Author.

● **Dr. Elliott P. Joslin is the Medical Director of the George F. Baker Clinic, New England Deaconess Hospital, Boston, Massachusetts.**

Presented at the New England Hospital Association Meeting, Boston, Mass., March 10, 1939

Efficiency in Making Tests

Efficiency in laboratory tests for diabetes has been attained and the methods now used have been extended for the benefit of all hospital patients. Formerly a single test for qualitative examination of sugar in the urine occupied at least three to five minutes, but today the tests for urinary glucose are carried on in multiples and instead of boiling up Benedict solution and the urine of one patient, the same procedure is carried out simultaneously for thirty, fifty, or more patients, and, indeed, could be simultaneously done without difficulty for hundreds of patients.

This saving of time is not by any means the only factor, because, whereas formerly, and, indeed, today in certain laboratories 25 cubic centimeters of quantitative Benedict solution were employed for a single test, at present just as accurate a reading can be obtained with 1 cubic centimeter of Benedict solution and in a far shorter space of time, thus achieving a saving of time and reagents. Efficient apparatus saves incalculable hours of work of technicians, and I suspect that we can anticipate further improvements, such as the photo-electric apparatus, which will reduce the cost of laboratory procedures still more.

This wholesale, rather than retail, performance of laboratory tests for the diabetic is not confined to tests with the urine, but is fully as valuable when applied to tests with the blood, but I do not think is fully appreciated and certainly not comprehended by doctors ordering blood sugar tests. The time required to do the test for one blood sugar is not very different from that to do several, even ten, blood sugars, because the periods of waiting between the different procedures can be efficiently utilized, and, furthermore, the time required for the adjustment of the eyes of the technician to read the final results is the same for ten tests as for one test. One should combine tests for blood sugar into a single period and if there are many to be performed during the day, these should be carried out at two or three stated intervals, rather than to ask, except in dire emergencies, for results each hour. Thus in Dr. Warren F. Cook's hospital the tests are read at 9:30 a. m., 11:30 a. m., 2:30 p. m., and 4:30 p. m. Physicians requesting laboratory work should become acquainted with this feature of the expense of the tests and not demand that the results should be reported in an hour, but rather at a period which fits into the hospital routine. One technician who can combine her work should be able to perform at least thirty tests for blood sugar during her hospital day, and this will indicate how reasonable the charge should be for the performance of one such test.

A doctor in Miami told me of a procedure by which patients in that city could secure blood sugar tests at low values; thus, certain days are designated as "Bargain Blood Sugar Days" and if the patients will have their blood sugars done on those days the fee is sixty per cent less than upon other days, and I dare say that you hospital superintendents would reap a greater return on the "Bargain Blood Sugar Days" when the patient is charged $2.00 per test than upon other days in the week when the charge might be $5.00.

The cost of a blood sugar test, as you are fully aware, is due in only small part to the actual work involved in the test. To secure the blood the technician often goes to the ward, and if the treatment of the diabetic is carried out efficiently, very likely she will not find the patient wanted, since all patients who are able should be allowed the liberty of being up and about in and out of the hospital for the sake of exercise during a considerable portion of the day; thus, a chance of failing to find the patient at the appointed hour involves much loss of time. To offset this, Dr. Cook has arranged that walking patients, unless for some reason especially indicated, go to the laboratory for the test, and it has been further arranged that hours for these tests shall follow the periods at which the ambulatory patients are assembled for their daily diabetic lecture. The number of hours thus saved offsets in part the greater frequency of such tests. There still remains time lost sending the technician to the ward to record results, because as a rule it is dangerous to trust to the reporting of results by telephone.

Needless repetition of laboratory tests wastes much money. Again Dr. Cook has so planned that limitations are placed on the number of repetitions unless definite and special requests are separately signed. I can secure any test I want for one of my patients at the Deaconess Hospital day or night and as many of them as I want, but there is no rule which involves the repetition of such tests *ad infinitum*.

The example of the reduction in the number of laboratory tests for diabetics has had a beneficial effect on all laboratory work in the hospital, because it has reduced the number of such routine tests for the determination of non-protein nitrogen, the detection of tubercle bacilli, and also many other procedures.

Utilizing House Officers for Intricate Tests Impracticable

The impracticability of utilizing house officers for intricate tests of blood sugar, CO_2, non-protein

nitrogen, and so forth, is not sufficiently realized. We have found at the hospital that, although student house officers may know how to do these tests if given plenty of time, yet if they are called upon at 2:00 a. m. at short notice in an emergency to carry out these intricate procedures, when perhaps they have not performed any of them for more than a month, their results may be inaccurate and lead to erroneous deductions as to the method of treatment to be pursued. That is why at present one technician lives in the institution and is always ready to work not only for the doctors on the staff, but for doctors in the neighborhood. This same procedure is followed at many Boston hospitals. It is simply unreasonable to wake a house officer at 2:00 a. m. and expect him to do a complicated laboratory test which it may be he knows how to perform but has not carried out in the laboratory for at least a month.

Use of X-ray

X-ray studies of diabetics are desirable. Our diabetic children are ten times more liable to tuberculosis than the average school child in Massachusetts. Of our patients who recover from diabetic coma, one in eight develops tuberculosis subsequently within three to five years. Arteriosclerosis is characteristic in diabetics in whom the duration of the disease is considerable. At present in our own group privately we are carrying out routine x-rays of the chest of our new diabetic patients and within a few weeks I think the number of such tests will be sufficient to give an idea of their desirability and their cost. Here again I should like to emphasize the necessity for wholesale, rather than retail, methods in the modern treatment of diabetes. Increase the output and reduce the cost to the patient should be our slogan.

Records

The simplification of diabetic records is generally appreciated by the hospitals which you gentlemen represent. It is not universally recognized and you can imagine my annoyance when asked to see a patient far away from Boston in a hospital where the reports of the blood sugar are reported upon individual sheets, the reports of the urine on separate sheets and the diets upon a third group of sheets, the weights upon a fourth, and, of course, temperature, pulse and respiration on a fifth. Upon one side of a sheet of paper, space is arranged so that all these data, save the latter, for two weeks are before me and it takes less time than for me to say it to grasp what has been the course of the patient not only during the preceding twenty-four hours but during all his stay in the hospital. Think of the reduction in cost to the hospital in paper and think of the reduction of time demanded of the doctor and think of the advantage to the patient of having all these data gathered together so that at a glance the physician can determine what next to do for him. The desirability of having the history of the patient follow a prescribed schedule far more than counterbalances the efforts of even the most intelligent house officer to record individual impressions. In fact, the charts are so arranged that these also can be introduced.

Type of Diabetic Hospital Population

Few diabetic children require treatment in a hospital for more than a short initial period unless complications arise. The treatment of a diabetic consists of diet, exercise, and insulin and, therefore, it is extremely difficult to carry out all these details for diabetic, but otherwise healthy, youngsters in a hospital. In camps or preventoria far better results can be obtained at half the cost. Thus, the expense of caring for groups of diabetic children at the Clara Barton Homestead Camp and the Prendergast Preventorium is surely less than half the cost of such care in the New England Deaconess Hospital and except for the initial care at the onset of the disease or during complications treatment is far more beneficial in these other places. We do everything to bring together children in camps or preventoria and last summer 250 of our diabetic children enjoyed such privileges. At these places we can provide laboratory facilities for two or three hundred dollars plus the cost of technicians and for the care of these children we had nurses who had grown up in their nursing careers with an intimate knowledge of diabetes. It is perfectly true to say that the results obtained by Dr. White in supervising these camp children was greater than we were able to secure in the hospital itself. Practically all procedures carried out in the hospital can be carried out at these camps and as I have indicated, the children get the advantage of seeing other diabetic children enjoying health, are able to have their meals at the most appropriate hours, are less likely to break diets, secure the benefit of exercise, and can be watched every minute in the twenty-four hours by most experienced nurses.

The number of diabetic children in the community is not likely to increase unless the upward trend of the birth rate for 1937 and 1938 continues in contrast to the declining birth rate which has become so manifest in the diminution of our school populations these last few years. It is true that the number of adult patients with onset of diabetes in childhood coming to the hospital may not decrease, because there are so many of

them today living for prolonged periods since their childhood that they are exposed to complications. Thus, we have over 136 children living who already have had the disease for fifteen years or more and, as you are aware, several years ago the Metropolitan Life Insurance Company calculated the expectancy of life of those developing diabetes at 10 years of age at more than 31.7 years.

Surgical Complications

Surgical complications are the cause for the entrance of approximately one-third of all my patients at the New England Deaconess Hospital. This arouses food for thought, because it is a fact that the great majority of these complications are avoidable. Perhaps the most frequent of these are gangrene and infections of the feet. For this reason, one night each week when the visitors of these patients come, my associate, Dr. Root, meets them and explains how they can care for their relatives not only with their present troubles but how they can prevent recurrences. A sore toe costs a hospital not far from $300, necessitates a patient remaining approximately four or five weeks and thus one old man or woman with a sore toe disbars from entrance to the hospital for lack of funds four or five or even six children who would have benefited by a week's stay. Obviously at the New England Deaconess Hospital, the necessity to conserve funds has made us adopt measures to prevent such waste of money.

A case of coma surely involves the expenditure of $100 for the hospital. Not only must the laboratory tests for the patient be multiplied, but often they must be undertaken at unusual hours when the expense is greater. Most of these patients must remain from at least a week to two weeks for recuperation. Furthermore, patients with coma are usually patients without funds, because intelligent patients and patients with capital are far less likely to fall into acidosis or if in acidosis to remain long without prompt treatment. This again is an indication for preventive instruction, if the hospital wishes to save money.

Surgery is so important at the hospital that I would like to call your attention to various aspects of it. Years ago the mortality among surgical diabetics was ten times that of medical diabetics. It is not strange, therefore, that realizing the surgical diabetic needed ten times as close medical care as the medical diabetic that at the New England Deaconess Hospital it was arranged that, as far as possible, the surgical diabetic should be treated in the medical wards under the supervision of nurses skilled in the medical treatment of diabetes. To make this agreeable to the surgeons, we brought into the wards far better apparatus for treating a surgical patient than surgeons could secure in their own surgical wards. Furthermore, by grouping the surgical patients in a few wards the time-saving element for the surgeons was enhanced. But this is not all the advantage which one attains by this method. The grouping together of the surgical diabetics makes it easy for one surgeon to treat many diabetics and thus acquire special knowledge of their needs. Eliason in Philadelphia brought out most forcibly that the results obtained by one-man surgery in the realm of diabetes were far better than where a group of surgeons operated and only recently Dr. Churchill at the Massachusetts General Hospital wrote me, "Better a youngster who has had special experience with the care of diabetics than the senior surgeon who includes diabetes with a hundred other interests."

Do you realize that accidents and broken bones occur with greater frequency in the hospital diabetic population than with the rest of the hospital population? For some years we have tried to avoid such contingencies by increasing the calcium in the diet of our patients and providing better prophylactic care.

Incidentally, may I remark that trauma as a cause of diabetes practically does not exist. As von Noorden said, the World War put it in the grave. Furthermore, I might add that although trauma indirectly may increase the severity of diabetes, so soon as the effect of the trauma is over, the diabetes returns to its original severity.

Pregnancy

Pregnancy today is a problem with diabetics. Last year forty-one of our patients are known to us to have been pregnant and doubtless there were many others. When we attempted to treat these patients at the New England Deaconess Hospital efficiency was lost and cost increased. Fortunately, Dr. Priscilla White has been able to send our patients to the Faulkner Hospital for confinement and there treatment is carried out in an institution where the management of pregnancies is routine and you can imagine how expenses for these patients have been greatly lowered. I think the Faulkner Hospital has enjoyed the arrangement, too, and Dr. White tells me that of the last 17 pregnancies treated after the beginning of the seventh month all the mothers and 16 of the 17 children survived, a short record, I confess, but one that I have not seen equalled elsewhere and I might add that of these 17 cases 8 were primiparae.

The Intravenous Nurse Essential

Methods adopted for the treatment of diabetics have led to improved methods for other surgical

cases just as new methods employed in the laboratory for diabetics have redounded to the benefit of other patients. For example, we were the first to introduce, so far as I am aware, the intravenous nurse as an essential personality in hospital practice. This nurse for seven years had taken blood sugars and became so adept that later she was called back to the hospital and her whole time devoted to intravenous duty. Now daily on the average she gives to the surgical and medical patients in the hospital nineteen intravenous injections of salt or glucose and participates in blood transfusions. She has even administered twenty-nine infusions of salt or glucose in twenty-four hours. One patient received at her hands 55 intravenous injections. You can imagine how the patients welcome so highly a skilled operator in comparison to the surgeon or house officer who does not have one-fiftieth her experience in intravenous technique. Furthermore, the saving of time for the doctors is not inconsiderable.

Care of the Feet of Diabetics

Just as we have the intravenous nurse who has grown into the position of doing intravenous work for all sorts of patients in the hospital, we have a foot nurse and, in fact, two foot nurses whose whole time is required with the intricate care of the feet of diabetics. Their equipment is so good and their work so efficient that we have been glad to give them thirty sets of instruments for their work so that these can be sterilized en masse and always be available for their patients.

Diet

Diabetics need special diets. It is true that these are a few cents more expensive than the ordinary diet. On the other hand, have you ever chanced to look at the tray of a diabetic when he has finished a meal? I beg you to do this and then walk around the wards and see the wasted food on the trays of the other patients. The diabetic is given definite quantities of specific foods and no more than he actually needs. In fact, often a reduction in weight is prescribed and so his diet is scanty in order to produce a loss of weight. I accept the opinion that the diet of a diabetic is more expensive, but one must prove to me that in the end it is more expensive than that of the ordinary patient because the other patient wastes so much and has so much needless food put on his tray.

The hours of distribution of meals for a diabetic are important. This is dependent on the simple fact that if the meals are crowded together between 8:00 a. m. and 4:30 or 5:00 p. m. all the work of digesting those meals is thrown upon the pancreas in a few hours instead of being distributed over twenty-four hours. Theoretically and practically, the diabetic does better if his meals are spread out over a long period. I realize this is difficult to arrange in a hospital, but it is easy to plan that the diabetic should be first in the ward to be served in the morning and the last to be served at night. Of course, patients may also require 5 or 10 grams of carbohydrate in the forenoon, afternoon, and when they go to bed in order to avoid reactions. Insulin formed in the pancreas in the body is supplied according to the demand for it by the diet, but insulin injected into the body lasts for hours and protamine zinc insulin exerts its power for twenty-four to forty-eight hours. It works while the diabetic sleeps and this is the reason why often it is essential to give the diabetic a couple of crackers with or without a bit of cheese or a glass of milk when he retires.

The diabetic diet today is simplicity itself. There is very little controversy among doctors about the standard diabetic diet. I think all agree the carbohydrate should be 150 grams or more and that the protein should be adjusted to the age, weight, and activity of the patient while the fat is regulated by the need for the patient to gain or lose in pounds.

The diet consists of three slices of bread and three moderately-sized oranges or their equivalents in other fruit, cereal half a portion, milk and cream in all from a half to one pint, 5 and 10 per cent vegetables four portions plus an egg, two portions of meat or fish and perhaps an ounce more or less of butter. These are served by weight to the patient while he is in the hospital, but he soon learns the size of the portions and at home can serve himself by weight or portions largely as he desires. Obviously your dietitians secure bread that is cut in standard ounce slices, buy oranges of a standard number and, in general, introduce comparatively few equivalents to the diet in order to avoid confusing the patient. Little by little they will learn that it is safer for the patient to learn a few subjects thoroughly than many inaccurately.

Exercise

Exercise is an essential factor in the treatment of the diabetic. It just makes my heart bleed to see a diabetic child, otherwise healthy, confined all day to a hospital bed. If the diabetic camp had done nothing else than to demonstrate the advantage of exercise in the care of a patient, it would have proved its worth. Years ago, we knew in a confused way that exercise was a potent agency with the diabetic, potent because with it certain diabetics were helped, but with others the

disease became more severe and they went into coma. Now we know the secret. The mild diabetic is like a normal individual. He has some insulin; and exercise plus insulin will lower the blood sugar. A severe diabetic is so deficient in insulin that with exercise his blood sugar rises instead of falls, but if we will supply him with insulin he assumes the status of the mild diabetic and normal individual and is benefited therefrom. This is the reason why exercise must be provided for all diabetics in bed or ambulatory, unless the disease is associated with an infection. If you wish to reduce the cost of care of a diabetic by limiting the number of days he spends in the hospital, arrange to give him exercise.

I suspect that the use of the Buerger Board, which is supposed to stimulate the circulation in the legs, may have its good effects dependent upon the exercise involved in its use quite as much as upon any improvement in the circulation. The use of exercise in the treatment of patients following amputations has greatly lessened hospital expenses. By our present rules all these patients are turned on their side every two hours day and night. In this manner not only do they receive exercise to a greater or less extent, but their backs are exposed to inspection by the nurses. Formerly we applied ultra violet rays to the backs to avoid the development of bed sores, but when the lamp broke we found that we obtained just as good results by turning the patients on their sides as if to receive the lamp as when they actually did have it. It lessened Dr. Cook's receipts from the ultra violet ray lamp, but it saved him prolonged treatment of a case as a result of bed sores.

Exercise is essential for the treatment of the hospital patient, because, when he goes home he will be exposed to it. If he does not learn how to adjust his diet and insulin to exercise in the hospital, how will he know how to adjust himself to exercise outside of the hospital? Long ago we found out with our children and, indeed, with our adults that we had them well trained for care if they would only remain in the hospitals forever, but subsequent reports drove home to us that our function in the treatment of diabetes was not to tell the patient how he could live in a hospital but how he could live in a home and in an office or factory. I just wish that you could only find work for all these patients in the hospital, because it is the working diabetic who does the best.

Incidentally, I can add that recently in a survey of many hundreds of my patients we have found that more than half are efficient and if we leave out those who are under twenty and over sixty-five years of age, the number who are filling full-time periods of work is very great. Soon one of our group will publish data on this point.

The Diabetic Store

Years ago with the discovery of insulin the necessity arose for its distribution and that led me into the development of the diabetic store. Originally I had a capital of $100. The profits obtained from the store were turned over for the use of the diabetic work at the New England Deaconess Hospital, but soon I found that the actual management of it was unwieldy and involved, in fact, a turnover of $30,000 a year. In consequence of this the store was assumed by the Deaconess Hospital and during Dr. Cook's wanderings about the country he found, I believe in Indianapolis, there was an arrangement in a hospital there by which patients could buy newspapers and chewing gum and tooth brushes which they had forgotten to bring in. In consequence, the store, originally existing simply to sell patients Benedict solution which could be made by the carboy lot instead of by the pint, grew in popularity and resulted in the development of what is known as the Pharmacy Store Fund from the proceeds of which four or five free diabetic beds are provided at the hospital. I recommend to you something in the nature of a diabetic store.

I do not recommend that the store should attempt to compete in the sales of insulin with outside pharmacists, because it is for the advantage of all diabetics to be able to buy insulin anywhere, but there is a place for the sale of certain diabetic articles in the hospital to patients which it would not be worthwhile for druggists generally to carry. You can imagine the cost of making a carboy of Benedict solution compared with the cost of weighing out the ingredients for a pint! Here again the diabetic store, which was an innovation in hospitals, has been of help for many other non-diabetic patients also in the hospital. Furthermore, in the diabetic store an opportunity has been provided for testing the value of various products for diabetics and make it easy for stores outside to introduce such wares on their own shelves which are of proved value.

Before leaving the diabetic store may I stress to you the importance of reducing the number of varieties of insulin on the market. An unused bottle of insulin on a pharmacist's shelf raised the cost of every other bottle of insulin which that pharmacist sells or any other pharmacist sells. Today the standard insulins are still U-10, U-20, U-40, U-80 and in protamine insulin U-40 and U-80. Crystalline insulin exists only in U-40 concentration. I am sure that I have the support of all the members of your respective staffs in

recommending that one give up prescriptions for U-10 and U-20 insulin, both of the regular and protamine variety. Abroad the loss incident to a multiplicity of insulin is far greater than here. We should endeavor to use a few varieties of insulin so as to enable the product to be sold at the least possible cost to the patient.

Instruction of the Diabetic

Schooling is good for children, but the most essential schooling for a diabetic child is to learn how to take care of his diabetes. This holds true for all diabetics. Only by adopting education in the treatment of diabetes can we hope for real improvement in its management and indeed only in this way can we hope for the earlier detection and prevention of the disease itself. All diabetic patients should be taught in the hospital. They should learn how to take care of themselves, so that they can do so when they are discharged. Diabetics may be bright, but most of them are old and the acquisition of knowledge does not come easily. "Line upon line and precept upon precept" alone will give results which last. Therefore, time must be spent upon the education of the diabetic as a part of his routine hospital care.

Diabetic classes are desirable because the experience of one patient voiced in a class often will carry far more weight than that of the nurse or doctor who might say the same thing. Our classes at the Deaconess go on each morning at half past ten and are conducted by one of us doctors. In the afternoon at half past one recitations are carried out under the supervision of the nurse who is responsible for the instruction of all the diabetics. In this way the patients really learn something. As far as possible, we encourage the relatives and friends of diabetics to come to these talks so that they will know all the better how to provide for the patients when they return home. In the classroom the diabetic is taught that gangrene, coma, and carbuncles usually come from neglect to follow treatment.

But I look upon these talks in quite another manner. To me the 600,000 diabetics in the United States constitute 600,000 health officers. They are officers for health in the families because they have a better knowledge of diets, a better knowledge of the advantage of medical and surgical care, a better insight into the value to be derived from research and furthermore a better appreciation of the need for operations upon themselves when their lives are completed and they are through with their own bodies. They are health officers capable of great influence in the community. With their Benedict test in their hands they can discount quack medicines; they know how to evaluate what is good and bad; they know that adherence to diet and insulin will make their urine sugar free and if they are neglectful of diet and insulin or dishonest with themselves, the results are poor. The advantages of training this army of 600,000 health officers are still greater. Who will take more interest in discovering diabetes early in his family than the diabetic? In this way only can we look forward to an earlier and earlier discovery of the disease and as you know the case discovered early, just as in tuberculosis, is best. Furthermore, these patients know the importance of heredity in the etiology of diabetes. They are perfectly well aware that 2 diabetics should not marry and have children even though only a seventh of the children of such a marriage would ever develop the disease before 40 years of age, leaving only another seventh to develop it between 40 and 55 and a third after 55 years when diabetes is quite amenable to control. The knowledge of the practical application of eugenics is more familiar to this diabetic army than to any other of which I am cognizant.

Conclusion

In conclusion may I emphasize the usefulness of this large group in our midst who fully realize the value of experimental research. Without the benefits of diabetic research diabetics died, but with it they now are alive and many of them live more efficiently and longer than those about them of similar age at the onset of their disease. And it is to these notable diabetics that we give a medal—for prolonging life's span after the onset of diabetes.

SUBSCRIPTIONS TO *HOSPITALS*

The annual subscription price to *HOSPITALS* is $2.00, and is included in the payment of annual dues for each institutional and personal member of the Association. Members may order additional subscriptions at the rate of $2.00 a year.

The subscription price of *HOSPITALS* to those who are not members of the Association is $3.00 a year.

Single copies may be secured for 30 cents a copy.

Before and After

WILLIAM O. RICE, M.D.

THE Crawford Allen Memorial, a branch of the Rhode Island Hospital near East Greenwich, Rhode Island, was opened in June, 1907. This was made possible by the gift of a former country and seashore estate to the Rhode Island Hospital as a memorial, to aid in the treatment of sick, helpless, and crippled children during the hot summer months. This estate, eighteen miles from Providence, bordering on Narragansett Bay, consisted of about 110 acres of woods and farm land, a large three-story brick house, barn, and farm buildings. The house, a mile in from the main road, with its large rooms and conveniences, was easily made adaptable to the care of patients.

Types of Diseases Treated

Children from the ages of three to twelve years were transferred to this new hospital from the Rhode Island Hospital, both bed patients and ambulatory. The types of cases treated were as follows: tuberculosis of bones, spines, and hips; children on curved frames and in traction; convalescent, medical and surgical patients, and those suffering from malnutrition. No pulmonary tuberculosis cases were admitted.

In the years from 1907 to 1927, for five months each year—May to October—the daily average number of patients was from 25 to 30. In the summer of 1907, the year it was opened, good friends of the hospital gave sufficient money to erect a one-story pavilion 75 ft. x 45 ft. at the water's edge about six hundred feet from the main building. This addition consisted of a living room 50 ft. x 20 ft., with two adjoining dressing rooms, toilets, and kitchen. A large piazza surrounded the building on three sides and on the south side a cement terrace was added later.

Here, at the pavilion, the children were brought soon after breakfast and remained until late afternoon. Daily, when the weather and tide were right, the patients who were able were taken into the salt water for bathing. All children were taken out on the terrace in their carts or wheel stretchers, where they were given sun treatment, under the supervision of nurses. It was surprising and pleasing to watch the marked improvement in the condition of these sick and undernourished children, which was brought about by the sun, open-air treatment, salt-water bathing, plenty of fresh milk and vegetables. The farm part of this estate furnished all the milk and a large amount of vegetables.

Presented at the New England Hospital Association Meeting, Boston, Mass., March 9, 1939.

The Author

● **Dr. William O. Rice is President of the New England Hospital Association and Superintendent of Rhode Island Hospital, Providence, Rhode Island.**

A kindergarten teacher supervised the education of the children during the summer, holding classes in the morning and afternoon.

New Memorial Building Erected

In 1927, through the generosity of friends of the Rhode Island Hospital, another memorial building was erected about two hundred feet nearer the water than the original building. With the erection of this new modern two-story brick hospital it was possible to care for more patients and keep the place open the year round. This building consists of four good-sized wards with the necessary utility and dressing rooms, kitchen, dining rooms for patients, nurses and employees; a large playroom in the basement and a well-lighted school room, 23 ft. x 49 ft., on the second floor. On the first floor, there is a white tile pool, 8 ft. x 14 ft. x 3.6, which can be supplied with salt water pumped up from the Bay. The water on its way to the pool is heated to the desirable temperature.

With this pool the patients can receive their salt-water treatment every day, summer or winter if necessary, although in the warm months they still go bathing in the Bay, weather permitting. Marked improvement has been obtained by the pool treatment of patients suffering from infantile paralysis, due in part to the employment of a masseuse who cares for these patients after they come out of the pool. It is remarkable to see how many of these children, buoyed up by the salt water, can use their wasted arms and legs. Many actually learn to swim.

Since the erection of this building with its adequate school room, the City of Providence has furnished two school teachers, at no cost to the hospital, except their transportation.

The number of patients has increased during the summer months from the original 30 to 75. The remainder of the year there has been a daily average of 45.

Change in Types of Diseases Treated

There has been a noticeable change in the past

Top: Photograph of Gammell Pavilion taken on August 26, showing children in the water at high tide.

Center: Photograph taken from the concrete porch adjoining the Gammell Pavilion after the hurricane. Only the foundation, bricks, and a few wash basins remain; the building was blown 1,500 feet away; some of the wreckage can be seen in the background.

Bottom: View of Esther Pierce Metcalf Building showing fallen tree and damaged roof.

Right: Another view of the Esther Pierce Metcalf Building showing damage to trees.

fifteen years in the type of diseases treated at this hospital. We no longer see rare acutely painful tuberculosis hips. Children suffering from tuberculosis of the spine with extreme kyphosis and tuberculosis glands of the neck are also a rarity. The number of patients on curved frames is much smaller. More convalescent cardiac cases are treated, and because of an epidemic of infantile paralysis in Providence about five years ago, there has been a marked increase in this class of patients.

The Hurricane

We will never forget that fateful day September 21, 1938, when the hurricane, with its wind and high water, caused such terrible destruction along the coast of Rhode Island.

At the Crawford Allen Hospital the damage was extensive. Because of the rain and strong wind, early in the afternoon the children had been brought from the pavilion at the shore to the main hospital. About 4:30 p. m., the wind became much stronger and the waves higher, pounding furiously against the breakwater at the shore. Those in charge at the hospital apprehensively watched the trees on the grounds blown down and the high tidal waves sweep up higher and higher over the pavilion and finally carry it away. The water gradually crept up to within one hundred feet of the main building before the tide changed, and the storm abated.

Unlike the Rhode Island Hospital, which generates its own electricity, the Crawford Allen Hospital depends on electrical power from the outside and because of damage to these lines, there were no lights and no water. The salt water had traveled so far inland, about a quarter of a mile, that the spring became contaminated, therefore no drinking water was available.

It is truly remarkable to note that during this

terrible chaos there was no hysteria among the children.

The morning after the storm disclosed a pitiful sight. Where the pavilion previously stood nothing remained but the cement foundation blocks and several plumbing fixtures were scattered around. This wooden building was literally torn to small pieces and deposited in woods five hundred feet from the shore and also in our sedimentation beds. Many slate were torn from the main hospital, and a chimney blown off the original hospital building. Hundreds of trees, oaks and pines, were leveled all over the property extending back to the main road.

Because of the damage and all the inconveniences, it was decided to bring all the patients, 48 in number, to the Rhode Island Hospital and close the place temporarily. This was done the day after the hurricane.

Since then the wreckage has been cleaned up, and nearly all of the buildings repaired. However, the hospital has not, as yet, been reopened, mainly because the spring water is still contaminated with salt, and there is no other source of fresh water. The salt content is gradually becoming less and our hopes are that the spring thaw and rains will clear the water which has so abundantly supplied the wants of this hospital all these years, so that we can reopen within a month or so.

A few of the patients treated during the last year at the Crawford Allen Memorial Branch

Our major problem is the need of additional facilities, and I know that you are giving this matter serious consideration. I recognize that we are innocent victims of a vicious circle. The tremendous tax drain on business and on the few remaining wealthy people, plus the uncertainty of administration policies, definitely restricts investment in and development of industry. This status quo of business precludes an increase in private employment and thereby maintains the present high level of the relief load. The cost of this relief program places an increasing load on real estate, business, and investments which will be reflected in even higher taxes. As this vicious circle enlarges philanthropy, naturally, shrinks. In the meantime we are faced with a demand we cannot meet with present facilities, and can see no present method of financing the additions essential if we are to meet our responsibilities. I hope you can find the answer.

Carl P. Wright, Superintendent of Syracuse General Hospital

These Principles Apply to Our Hospitals

Dr. Arthur E. Morgan, the distinguished President of Antioch College, says:

"How to achieve good proportions of competition and cooperation between the members of society is a major problem of social evolution. The energies of society should not be consumed by internal friction, but should be unified and directed to achieving the ends of society as a whole. Yet it is necessary for the good of society that the most efficient individuals survive and inefficiency be eliminated.

"Just as the human body does not thrive by unlimited commitment to any one tendency, but by achieving a fine proportion and balance between opposing factors, so social evolution will proceed best, not by commitment unreservedly to competition or to cooperation, but by a wholesome balance between the two."

The Massachusetts General Hospital

Its Development, 1900-1935

FREDERIC A. WASHBURN, M.D.

Extracts from the Chapter on Administration

IT is a far cry from the day when it was often the case that a physician who was a poor practitioner, a parson who was not a success in the pulpit, or almost any business man with no special training was good enough to be a hospital superintendent. This never did apply to the Massachusetts General Hospital, whose executive officers have always been carefully selected according to the conception of the job at the time. Today it is the rule that hospital administrators go through long periods of training before they can aspire to head important hospitals. This training is usually by apprenticeship, and the position of Assistant Director in our important hospitals is in demand for this purpose. There are also courses in hospital administration given in certain universities and under the auspices of the American Hospital Association.

The Massachusetts General Hospital has been a leader in training physicians for this special work. Dr. Herbert B. Howard must be given credit for inaugurating the system of training now in vogue, by which the Director has as his Assistants a number of young medical men who are not expected to remain many years in that capacity. When the Director thinks them sufficiently trained, and an opportunity presents itself, they are to accept appointments in charge of hospitals.

Inasmuch as hospitals are now such complicated institutions, giving such a variety of services to the community, and as their annual maintenance costs are so great, it behooves hospital trustees to select for these important tasks only thoroughly trained men of the highest ability. It is not at all unusual for a great hospital to spend two or three or even more millions of dollars a year. By the financial standard alone the job is a responsible one. When the hospital is administered so that the patient gets the best of care, so that research is encouraged, medical and nursing education maintained at a high level, and the other hospital functions carefully fostered, the job is a heavy one indeed. The right executive can make a hospital; the wrong one can do it great injury. He is probably the most important officer of the institution. This chapter will tell how the Massachusetts General Hospital has reached its present level of administration, and give some account of the service of its executive officers. . . .

The Author

● **Dr. Frederic A. Washburn is Director Emeritus of The Massachusetts General Hospital and Director of the Cambridge Hospital, Cambridge, Massachusetts.**

The early hospitals of our country were patterned after the voluntary hospitals of England. There it was and, in some cases, still is the custom for trustees actually to take a direct part in the details of administration. So in the early rules of the Trustees we find that the twelve Trustees "divide themselves into six Visiting Committees, each to consist of two Trustees and each to serve for two months." The Visiting Committees met once a week at the Hospital. They made "rules and terms for the admission of patients," and admitted and discharged patients at their discretion. Amongst other duties the Visiting Committees "are to visit wards and rooms once every week; shall inquire into the conduct of the Officers and Attendants; examine whether economy be preserved, and whether the entries, wards, apartments, beds and linen be clean, well aired and in good order; whether the food be of good and proper quality; and whether the directions of the Acting Physician and Acting Surgeon and their Assistants respecting the patients be carefully, punctually and humanely executed." The Visiting Committee were to do all these things themselves, and records show that they did try faithfully so to do. Thus, at the beginning the Hospital had many managers—each member of the Board, and the Superintendent and the Apothecary. . . .

In spite of this divided authority and multiplicity of bosses and duties, and the small pay, Captain Nathaniel Fletcher and twenty-one other applicants—sought the job of Superintendent. . . .

To be published by the Houghton Mifflin Company, Boston, Mass., within a few weeks.

[Captain Fletcher was succeeded by Nathan Gurney, 1825-1833; Dr. Gamaliel Bradford, 1833-1839; Captain Charles Sumner, 1839-1841; Colonel John M. Goodwin, 1841-1845; Captain Richard Girdler, 1845-1858.]

The organization of the Hospital from 1821 to 1858, never one to permit of high efficiency, showed its inadequacy in the expanded Hospital of the fifties. As a result of a communication from the House Officers and the careful investigation of the Trustees, a new order was ordained. A physician was to become Superintendent, with the title of Resident Physician.[1] This action was taken by the Trustees in spite of the vote of the Board of Physicians and Surgeons "that although we believe that the administration of the internal discipline of the hospital may be improved, we are unanimously of opinion that this end will not be accomplished by the appointment of a Resident Physician." A further communication of the Medical Board stated that the rules submitted by the Trustees, showing the proposed functions of the Resident Physician, had been considered and that it was recommended to the Trustees that a part of the duties allotted to the Resident Physician should be assigned to a Superintendent, an Admitting Physician, and also a Steward—if it should be thought desirable to delegate for more efficient performance a part of the duties of the Superintendent. Although the first report of the Trustees' Committee to the Board was that the Steward should be independent in his department, upon further consideration the Resident Physician was given authority over him. So a physician became Superintendent, with full authority except for the professional care of the patients. He became the executive officer of the Trustees, who hereafter administered the Hospital through him and abolished direct action by the Visiting Committees. . . .

Dr. Benjamin Shurtleff Shaw, a graduate of Harvard College in 1847 and of the Medical School in 1850, became the seventh superintendent and first Resident Physician (Director) in 1858. The Medical Board invited him to attend its meetings, and he was made librarian of the Treadwell Library. This appointment of a physician as chief executive officer, a man who had the confidence of Trustees and Staff, was the most important forward step the Hospital had taken, and was an example widely copied by the successful hospitals of America. Dr. Shaw held office from 1858 to 1872. . . .

Dr. Norton Folsom (M.D. Harvard 1864) became the eighth superintendent, or, as the title now was, Resident Physician. . . .

[1]Since 1921 this officer of the Hospital has been called the Director.

Dr. Folsom was one of those invited to advise the Trustees of the Johns Hopkins Hospital as to the organization and construction of that institution. There were four others who, together with Dr. Folsom, submitted separate plans and schemes of organization. A volume containing these reports was published in 1875. A quotation from Dr. Folsom's report gives his idea of the duties of the Resident Physician (Director), and is probably a résumé of those duties at the Massachusetts General Hospital of this period.

A Resident Physician—the executive officer; in constant and confidential communication with the Trustees, and in professional sympathy with the medical and surgical staff, he is better able to regulate action, and harmonize various interests, and to control subordinates of varied position and character, than a non-medical superintendent. His duties include those of a steward, and admitting physician; but he should have an assistant, and one or other should be always at the Hospital. Under the direction of the Trustees, he has control of the Hospital in all respects, except the treatment of patients. He makes all purchases for the regular needs of the Hospital, and receives all moneys paid for board or otherwise, and his accounts are settled monthly with the Treasurer. His decisions as to the admission of patients, their rate of board, shape the whole character of the charity. He appoints and discharges all employees not elected by the Trustees. He is responsible for the proper warming, ventilation, cleaning, and repair of the Hospital, and for the discipline of house officers, employees, patients, and visitors. He provides the diet and remedies ordered by the physicians and surgeons, and keeps records of applications, admissions, discharges, etc. He has custody of all property at the Hospital. In case of emergency, in the absence of the visiting physicians and surgeons, he acts for them in regard to treatment, and discharges patients if discipline requires it. He assigns patients to the proper ward and bed, and directs removal or change, when necessary. He orders all autopsies in writing, under rules made by the Trustees. He makes an annual report to the Trustees of the doings of the year, and the state of the Hospital.

A very sound letter on the subject of hospital administration and the powers and duties of the Superintendent was written in 1879 to Mr. Samuel Eliot, Chairman of the Trustees of the Massachusetts General Hospital by Dr. Cowles, then Superintendent of the Boston City Hospital and about to be made Superintendent of the McLean Hospital. The letter is voluminous. Dr. Cowles quotes at length a letter from himself to Dr. Billings, an army officer who was the authority of those times upon hospital organization and construction. His argument is for the sound system of administration—which makes the Director of the hospital a medical man, the representative and executive officer of the Trustees in authority, under them, over all parts of the hospital except the direct professional care of the patients. He is to nominate or appoint the Superintendent of Nurses, the Steward and all other department heads with the power to delegate duties to such officers. He is

to reward, punish, or discharge after consultation with the Trustees in important cases. Dr. Cowles stresses the importance of having no department head look for orders directly to a member or members of the Board of Trustees. . . .

Dr. James H. Whittemore, the ninth superintendent and the third Resident Physician (Director), had been an Assistant Physician at the McLean Hospital from 1862 to 1871, and from 1873 to 1876. He received his medical degree from Dartmouth College in 1862, and in 1884 that college conferred on him the honorary degree of A.M. . . .

Dr. John Washburn Pratt became the tenth superintendent or fourth Resident Physician (Director) in 1887. Dr. Pratt was graduated from the Massachusetts College of Pharmacy in 1877, and had been Apothecary at the Hospital from 1881 to 1884. He then studied medicine and was a House Pupil in 1886, graduating from the Harvard Medical School in that year. . . .

Dr. Herbert Burr Howard, Harvard A.B. 1881. M.D. 1884, was the eleventh superintendent and fifth Resident Physician (Director). Dr. Howard, upon graduation from the Medical School and after a month or two as Assistant Physician at the State Infirmary at Tewksbury went to Colorado, where he practiced for two years at Idaho Springs. In 1887 he returned to the State Infirmary as First Assistant Physician and became Superintendent of that Institution in 1891. On October 1, 1886, he married Dr. Emily Pagelson, at that time Resident Physician at the New England Hospital for Women and Children.

Dr. Howard's services to the Commonwealth in connection with the care of the insane were notable. In 1891, at the request of the Board of Lunacy and Charity, he spent his vacation in visiting town almshouses for them. Due largely to his report, the Board decided that, to insure humane treatment, all insane persons must be cared for by the State in its own hospitals. Legislation to this effect followed. When Resident Physician (Director) at the Massachusetts General Hospital, he was chairman of the State Board of Insanity. In this capacity he found the land and chose the site for the Gardner State Colony. As Chairman of the Trustees of this unique institution he with its first Superintendent, Dr. Joseph B. Howland, constructed the original buildings, perfected its organization, and started it upon the successful career ably continued by its present (1938) Superintendent, Dr. Charles E. Thompson.

Dr. Howard's success in developing the State Infirmary, his economical construction of efficient buildings, the general good order and discipline he established there were the sufficient reasons for his election as Resident Physician (Director) of the Massachusetts General Hospital. The Trustees had in mind much needed construction at the General Hospital, and required a man of just his experience. They had recently completed a large development at Waverley, which allowed the McLean Hospital to move from its ancient location in Somerville to the new and splendid site and buildings on the hill in Belmont. Encouraged by the munificent bequest of Henry L. Pierce and urged by the pressing needs of the General Hospital, the Trustees, with their new Resident Physician, proceeded with their plans.

Dr. Howard, under the direction of the Trustees and with the architects Wheelwright & Haven, prepared a block plan for the growth of the Hospital as they saw it. The Trustees decided upon the immediate erection of the Operating Building, Domestic Building, Power House, an addition to the Thayer Building, and a little later the new Out-Patient Building, all as described elsewhere in this volume. The Weld Ward (G) and the Orthopaedic Ward (1) were also built during Dr. Howard's administration, and the Zander Room equipped in the old Surgical Amphitheatre after the removal of the seats.

In the Annual Report for 1903 the Trustees tell of their study of the administration of the Hospital:

> The prospect of a much larger deficit than usual and the requirements incidental to the opening of new departments have forced the Board to give much serious attention during the year to administrative questions, and they have taken the first steps towards the adoption of a general plan of administration for the Institution as a whole, including both Hospitals and the Convalescent Home. It is expected that during the coming year this plan will result in the establishment of a system which will put into the hands of one department all the purchasing power of the Institution, together with such merging of the various mechanical and industrial departments as will effect the greatest economy, together with the greatest efficiency.
>
> The Trustees have also provided for the retirement when sixty-four years of age of the Resident Physician at the General Hospital, and his first and second Assistants, and the Medical Superintendent at the McLean Hospital, and his first and second Assistants, and for the payment to them of a proper pension. It is expected that this system will attract and retain in the employment of the Hospital officers of the highest attainments.

In the list of officers for 1904 appears the new title of Administrator, with the name of the occupant of the position, Dr. Herbert B. Howard, directly after the names of the Trustees.

Dr. Howard thus became the executive officer of the Trustees in all three institutions, the General Hospital, the McLean Hospital, and the Con-

valescent Hospital, retaining the title of Resident Physician of the first, and Superintendent of the last named. He was, in addition, the Administrator of all three.

In 1905 Dr. Howard as Administrator, Dr. Tuttle as Medical Superintendent, with Philip B. Howard as Architect, built the Codman House at the McLean Hospital. At the General Hospital the following matters are reported:

> Some methods of utilizing hospital waste have been introduced, the most important being the repeated use of absorbent gauze, which formerly was destroyed after being once used. Now by a system of washing and sterilizing introduced by Dr. Washburn, the gauze is used over and over again, making a considerable reduction in expense; even the small, torn pieces are used after treatment in the place of absorbent cotton or oakum. This system has been since introduced into many of the larger hospitals.

The suggestion that gauze might be reclaimed and re-used was first made to Dr. Washburn by Dr. Samuel Jason Mixter. The former worked out the procedure and reported it at the American Hospital Association Convention in Boston in 1905. At that time, also, the Surgical Apparatus Shop was installed and wooden legs were manufactured—the latter industry carried on for a short time only, while the services of an expert were available. The Hospital manufactured much of its own furniture, and Dr. Howard and Dr. Washburn published booklets describing these procedures.

In the year 1907, Dr. Howard was given a long vacation in which he visited Europe and studied hospitals. The report of the Administrator of the Massachusetts General Hospital and Resident Physician of the General Hospital was made in his absence by Dr. Washburn. In it is noted the completion of the Codman House at the McLean Hospital and the opening of the Orthpaedic Ward (1) at the General Hospital. In May 1908, Dr. Howard's resignation took effect.

The will of Peter Bent Brigham provided for the erection of a general hospital in Boston. This money had now accumulated to such a sum that the trustees of the proposed institution felt justified in preparing plans for its construction. In looking for their first Superintendent they found in Dr. Howard the best-equipped man in the country for building and organizing the new hospital. His long experience in hospital administration, the many buildings he had planned at the State Infirmary at Tewksbury and at the Massachusetts General Hospital made his choice inevitable. With great reluctance the Trustees of the Massachusetts General Hospital parted with him.

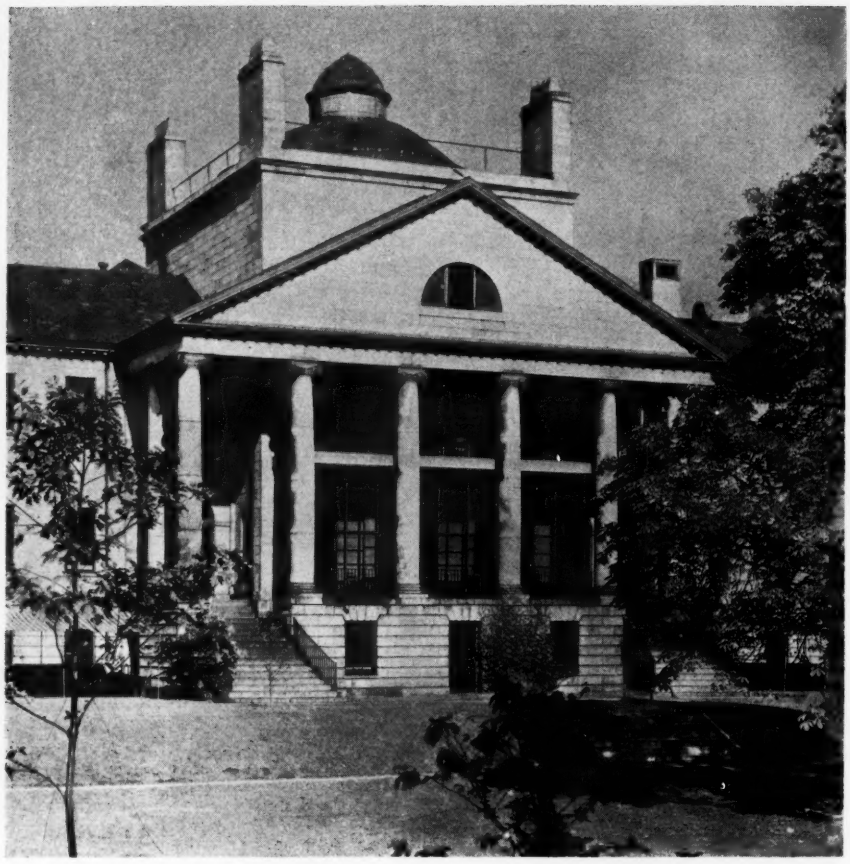
Dr. Howard, as Superintendent of the Peter Bent Brigham Hospital, with the architects Codman & Despradelle, built that hospital. The economical planning he was able to effect saved much money in construction and served to increase its endowment. He guided the early growth of this institution, which has made such notable contributions to hospital development. Dr. Howard retired in 1919. Although in poor health for some months, he had continued on duty in order that his successor, Dr. Joseph B. Howland, might carry on at the Massachusetts General Hospital until the return of the Director, Dr. Washburn, from military service abroad. Dr. Howard died suddenly on March 6, 1923. The Trustees passed the following resolution concerning him:

> Resolved, That the Trustees learn with sorrow of the death of Dr. Herbert B. Howard, Resident Physician of the General Hospital from 1897 to 1908 and Administrator of the Massachusetts General Hospital from 1904 to 1908. As the Executive Officer of this Board Dr. Howard had its entire confidence. His rugged integrity and high ideals of service were of inestimable value in the example set to officers and employees. During Dr. Howard's administration many important hospital buildings were constructed and the Hospital greatly increased its usefulness to the community by steady growth and development wisely guided in great part by him.

The group of men whom he trained in hospital administration remember him affectionately as their guide and mentor.

Dr. Howard was an oarsman when a student at Harvard, a man of powerful physique. He drove to Waverley and about his errands in the city a big horse hitched to a very high, strong buggy. He took the money and checks for deposit down to the old Merchants Bank Building on State Street. When he stopped before the bank he would get out, set down the weight which with its strap was used to hold the horse, take out his bag of money. He always vehemently denied that he once placed the bag of money upon the curb and carried the horse weight into the bank. When he concentrated upon Hospital problems he might readily have done this, but the story is supposed to be apocryphal.

He believed, as did many in the early days of automobiles that electricity would prove to be the preferred motive power for them. He purchased for the Hospital an electric runabout, and in order to have enough power he placed in it a double set of wet batteries. This placed the driver high in the air. The vehicle was steered by a tiller, had a short wheel base, and was very heavy. The tires were solid and smooth. Dr. Howard's successor, who inherited this vehicle, well remembers two experiences: one on a wet, smooth pavement when it spun like a top and made two complete revolutions, and another time, on a trip to the McLean Hospital, when his secretary, Mr. William S. Ripley, was learning to run it. Con-



Bulfinch Building

fused by the mysteries of the tiller, he pulled it hard a-lee, ran up the side of a hill, overturned the contraption, and threw both occupants out—fortunately clear of the heavy batteries.

Dr. Howard's teaching of his Assistants was admirable. The writer recalls that, when the subject of the construction of a new building was under discussion, Dr. Howard spoke to the following effect: "Plan for what is right and what is needed by the Hospital, and build as to size and material and method of construction in a way that will give the best results. Let no one persuade you to do an inferior job. Your Trustees and others who provide the money will consider your ideas too large and your building too costly, but, after the immediate pang of paying for the building is over, they will take a real pride in it. But, if corners have been cut and construction is faulty or the building is inadequate, these things are in evidence as long as the structure lasts, and you will always be criticized for erecting such a building."

The position of Assistant Resident Physician had been created in 1897. The Trustees' Report for that year reads:

> The Resident Physician has been granted the assistance of a stenographer and typewriter, and in the present year has been allowed an Assistant Physician. His time will thus be freed, in a large measure, of routine and other duties which can be as well done by less highly paid employees.

Up to this time, communications of the Resident Physician were written personally in long hand. The Assistant Resident Physician was not at that time a definite appointee but was a recently graduated House Pupil, employed for a short period as one became available.

Dr. Frederic A. Washburn, Jr., First Assistant Resident Physician of the Hospital, succeeded Dr. Howard in 1908. Dr. Washburn was a graduate of Amherst College, A.B. 1892, and received his degree from the Harvard Medical School in 1896. He was an intern at the Children's Hospital and surgical intern at the Massachusetts General Hospital, graduating in 1897. On December 16, 1898, upon his return from the Porto Rican Campaign, Dr. Washburn was chosen to fill the newly created position of Assistant Resident Physician (Assistant Director). He resigned this position in the spring of 1899 to become Assistant Surgeon, 26th U. S. Volunteers, for service in the Philippines. Dr. Howard T. Swain succeeded him as Assistant Resident Physi-

cian. Dr. Walter S. Johnson and then Dr. Hermann W. Gross succeeded Dr. Swain as Assistant Resident Physicians, and in 1903 Dr. Washburn's name appears as First Assistant Resident Physician, and Dr. Gross's as Second Assistant Resident Physician.

It was the original plan that an Assistant Director should stay at the Hospital only a few years, as it was intended to make this a training school for hospital executives. This plan has been modified in that the First Assistant Director is now recognized as a permanent officer, and since the depression men have been kept on because jobs at other hospitals have not been available and because of the changing of the administrative head of the General Hospital.

Among the men trained here who have become the directors of other important institutions are: Dr. Joseph B. Howland, Superintendent of the Peter Bent Brigham Hospital; Dr. Louis H. Burlingham, Superintendent of the Barnes Hospital, St. Louis; Dr. George A. MacIver, Superintendent of the Worcester City Hospital; Dr. Harold W. Hersey, Superintendent of the Springfield Hospital, Springfield, Mass.; Dr. Nathaniel W. Faxon, Director of the Strong Memorial Hospital, Rochester, N. Y., and now Director of the Massachusetts General Hospital and the Massachusetts Eye and Ear Infirmary; and Dr. W. Franklin Wood, Director of the McLean Hospital. Five members of the administrative staff of the General Hospital have been President of the American Hospital Association: Drs. Howard, Washburn, Howland, Burlingham, and Faxon.

Upon being appointed Administrator and Resident Physician of the General Hospital, Dr. Washburn assumed the other duties of this office in 1908, as Administrator of the McLean Hospital and Superintendent of the Convalescent Hospital. Dr. Howland became Assistant Administrator and Assistant Resident Physician. . . .

In 1908 the Hospital cared for the poor only, and no physician was allowed to charge a fee to one of its patients. There were, for bed patients, only the wards of the General Hospital—those in the Bulfinch Building and the one-story so-called "lower" wards. There was an Out-Patient Department and an Accident Service. In 1934 the Hospital was caring for all groups in the community. There had been added the Phillips House for those well able to pay somewhat more than cost to the Hospital and a reasonable fee to the physician, the Baker Memorial with its regulated hospital and professional fees for people of moderate means, and the Diagnostic Clinic for ambulatory patients of moderate means with obscure diseases. The Out-Patient Department had become allied with that of the Massachusetts Eye and Ear Infirmary, and increased largely in number of patients. This great development caused large increases in personnel, in buildings and equipment, in numbers of patients. The following tables indicate these:

GENERAL HOSPITAL GROUP

Expenses

1908	1933
$317,832	$1,814,492

Receipts from Patients

$135,002	$1,146,003

Patients' Days' Treatment

General Hospital...106,034	General Hospital..133,810
	Phillips House.... 18,805*
	Baker Memorial.. 48,395
	Total 201,010

Out-Patients' Visits

General Hospital...116,008	Combined Out-Patient Departments of the Hospital and Infirmary .....316,653†
Massachusetts Eye & Ear Infirmary. 78,493	
Total 194,501	
Daily average..... 641	Daily average.... 1,052

Emergency Ward

Total visits..... 5,313	Total visits..... 14,070

*1933 was a depression year. Patients' days' treatment in the Phillips House have been as high as 32,324; this in 1926.
†In addition there were 638 visits to the Diagnostic Clinic.

As the major divisions of the Hospital increased in number, a policy of decentralization was carried out. For the purposes of the care of the patient, the Hospital organization is a group of units rather than one large unit. The General Hospital, the Out-Patient Department, the Phillips House, and the Baker Memorial function with staffs whose services are confined each to its own unit, so that the administration of each has intimate touch with the patients and contact with problems not too great or varied. This division gives each unit the advantage, inherent in a small hospital, of intimate personal knowledge of the patients by the executives. It has the economic advantage of a great hospital in that certain functions are performed by central factors—for example, laundry, heating, light and power, kitchens to a degree, store and mechanical departments.

The Out-Patient Department was placed under an Assistant Director as early as 1903; the Phillips House was from its beginning placed under a selected nurse of administrative experience as Assistant to the Director; and the Baker Memorial from its opening was under an Assistant Director. The First Assistant Director has for

many years been the executive officer in charge of the General Hospital and the Emergency Ward, as well as the representative of the Director when the latter officer is away or concentrating on important problems of Hospital development. One of the other Assistant Directors acts as understudy to the First Assistant Director. The policy is for the lower three men to change jobs occasionally, in order that all may have experience in all departments of the Hospital.

These officers meet with the Director for consultation and determination of policies. There are also committees of the Staff and Trustees upon the Phillips House and the Baker Memorial. They make recommendations to the General Executive Committee, and through it to the Trustees. There is a Staff Committee on the Out-Patient Department, which reports to the General Executive Committee.

In 1915 it became an established policy that the Director of the Massachusetts General Hospital and of the Massachusetts Eye and Ear Infirmary should be the same individual. Thus, the Infirmary, although a separate corporation, is practically another unit of one great institution. A nurse of experience is in charge there also as an Executive Assistant. She has her group of admitting and executive nurses, and reports to the Director.

Attached to the administrative department in the General Hospital are four Graduate Nurses of experience who admit and discharge patients and perform routine inspections. They are called Executive Assistants. . . . Another group of nurses who should be mentioned are those who have carried the heavy burden of responsibility of the administration of the Operating Building. . . .

In 1933 the position of Health Officer was created, to safeguard the health of officers and employees of the Hospital. This service, with its careful records, now employs five physicians and is a most important agent in maintaining the efficiency of the organization. The physician in charge is Dr. Robert S. Palmer. . . .

The physical developments of the General Hospital plant, 1908-1935, described in detail in the following chapter, may be enumerated here. They were: the enlargement of the Hospital yard by the addition of land obtained by tearing down buildings on Fruit and Blossom Streets; the purchase of the old building that had originally been the Harvard Medical School and later its Dental School; the acquisition of land bounded by Fruit, North Grove, Parkman, and North Anderson Streets, and the erection of the Walcott House for nurses upon this lot; the addition of land upon both sides of North Grove Street, that on the easterly side becoming a parking yard for automobiles; the moving and raising of Ward F, with a new Ward A placed beneath it; the building of the Moseley Memorial and the Phillips House; the addition of a fifth story on the Walcott House and the improvement of the Thayer Building for nurses; the reconstruction and fireproofing of the Bulfinch Building; the erection of the Connecting Building; the rebuilding of the Allen Street House and the renovation of the Pathology Laboratory; and the building of the Baker Memorial.

There were many minor bits of construction, such as the remodeling of certain houses for nurses at 35 North Anderson Street, the house at the northwest corner of Cambridge and North Grove Streets, which was moved to the north when Cambridge Street was widened, and the houses at Nos. 90 and 92 Charles Street; the reconstruction of the operating room of Ward E into a twelve-bed ward, and the building of a new cross corridor. Such were the physical developments. During this time Charles Street was widened and a station of the Boston Elevated Railway and later a traffic circle were built at Cambridge and Charles Streets.

During the period 1908-1935 the notable change in the administration of the Hospital was the formation of the General Executive Committee, with its close co-operation of Trustees, Staff, and Administration. The appointment of paid full-time Chiefs of Medicine and of Surgery and the consequent growth of research, the formation of special clinics and the special assignments in Surgery were important. There was improvement of facilities for adequate diagnosis and treatment of patients, for study and investigation of disease, and the teaching of Medicine. These are described in greater detail in a later chapter.

A great accomplishment, without which few of these things would have been possible, has been the elimination of jealousy and friction between Staff and Administration, and between either or both and the Trustees, so that all now pull together. The formation of the General Executive Committee of the Staff did this, and a most important feature was that the Director was Secretary of this body and thus became the executive officer of the Staff as well as of the Trustees. For a young Director the problem of enforcing obedience to rules upon the older members of the Staff, under whom he has so recently been student and intern, is a delicate matter. When later the Staff is composed largely of men who have been House

officers during his administration the Director's difficulties are much diminished. When he has the backing of the Staff members of the General Executive Committee, his burden is further lightened. . . .

The years of the World War brought weighty problems to the Hospital and great strain upon its resources. A Base Hospital under the auspices of the Red Cross was early formed. It was later mustered into the service as U. S. Army Base Hospital No. 6, and saw nearly two years of war duty, mainly in France at Talence, a suburb of Bordeaux. The Hospital furnished the United States Army and Navy from its staff and alumni 238 officers, from its alumnae 228 nurses, and a number of enlisted men from its personnel. Under Dr. Howland as Acting Resident Physician (Director) during the absence of the Resident Physician on military service, the Hospital cooperated with the Government in the care of sailors in extemporized wards. A depleted staff, assisted by physicians who had retired from active duty, combated an epidemic of scarlet fever and the very serious influenza of 1918. Great credit is due to Dr. Howland and the Hospital staff and nurses for carrying on as they did in this trying period. Upon the departure in 1919 of Dr. Howland to assume his new responsibilities as Superintendent of the Peter Bent Brigham Hospital, the Trustees passed the following resolution:

Voted: That the Secretary be requested to convey to Dr. Howland the very sincere regret of the Trustees at the severance of his connection with the Hospital, and their gratitude for his unflagging diligence and great ability in the execution of the duties of the offices held by him during his long service with the Hospital, and particularly during the last two years, when, as Acting Administrator and Acting Resident Physician he has so ably assisted the Trustees in maintaining the efficiency and high standard of the Institution during that critical period.

In February 1919, while the Resident Physician was on duty with the American Expeditionary Forces, the Trustees decided to separate the positions of Resident Physician and Administrator. Dr. Washburn was retained as Resident Physician, and Parker H. Kemble was made Administrator. Upon his return to the Hospital, Dr. Washburn, at the request of the Trustees, agreed to try this scheme for one year. At the end of the year, as it had again been demonstrated that there cannot be two executive heads in one institution, the Administrator was allowed to resign. The administration of the McLean Hospital was returned to the Medical Superintendent of that institution, and the title of Resident Physician at the General Hospital was changed to Director, under which title Dr. Washburn again became the sole executive officer of the Trustees at the General Hospital.

Certain procedures developed during Dr. Washburn's administration helped to solve medical, social and economic problems. The most important of these were Medical Social Service under Dr. Richard C. Cabot and Miss Ida M. Cannon, Follow-up or End Results as urged by Dr. E. A. Codman, and the development of the Baker Memorial Plan, under which people of moderate means were assured of the best diagnosis and treatment at a price they can afford to pay for both hospital and medical bills. An attempt was made, under the leadership of the Massachusetts General Hospital, to establish in the community voluntary insurance for hospital and medical services. Both these plans were beaten by organized medicine. Hospital insurance has since been accepted. Some form of insurance for medical bills will undoubtedly follow. It is to be hoped that it is not too late for a voluntary plan.

The very important close association between the Hospital and the Massachusetts Eye and Ear Infirmary began in 1915 when the superintendency of the latter institution was given to the Director of the former. The Connecting Building made possible the amalgamation of the Out-patient Departments of the General Hospital and the Infirmary, and the union of the Laryngological Department of the Hospital with the Aural Department of the Infirmary, with beds in the Infirmary. The North End Diet Kitchen came to the Hospital. Occupational Therapy was developed and formally recognized. The School of Nursing, the Libraries, the Dietary Department, the Mechanical Department, and all the other departments increased in numbers and importance with the great expansion the Hospital had undergone.

In the decade of the twenties the Trustees went to the public for money several times. Large sums were given for the building and reconstruction of that period. After much hesitation and study of the matter during a number of years, the Hospital joined with the other charities of Boston in 1932 in an annual appeal for money. The Hospital has found this to be to its financial advantage, and so far there has been no real loss of its independence. A plan somewhat similar to the one finally adopted was suggested to the Trustees by a committee, of which Edward Jackson was chairman, in 1885. The Trustees of that day took no action in the matter.

The great economic depression of the early thirties reached its depth in the latter years of

this administration. Certain activities were curtailed, and the development of the Hospital came to a standstill. Salary and wage cuts were considered necessary, and they were accepted in excellent spirit by officers and employees. . . .

Upon reaching the retiring age in February 1934, Dr. Washburn was made Director Emeritus. During the ensuing three years he was Commissioner of Institutions, City of Boston, which position he resigned in February 1937. He then became Director of the Cambridge Hospital.

Dr. George Hoyt Bigelow succeeded Dr. Washburn as Director of the General Hospital group in Boston and Director of the Massachusetts Eye and Ear Infirmary. Dr. Bigelow was the son of Dr. Enos Bigelow of Framingham, Mass. He prepared at St. Mark's School, was graduated from Harvard, A.B. 1912, M.D. 1916, and served as a medical intern at the Massachusetts General Hospital in 1917 on one of the war-shortened services. Upon graduation from the Hospital he was commissioned in the Medical Corps of the United States Army and saw active service in the American Expeditionary Forces as Captain Bigelow, attached to Base Hospital No. 55. After the war he went to Santo Domingo to study tropical diseases and then took the course at the Harvard School of Public Health, where he received the degree of Doctor of Public Health in 1921. He became Medical Director at Antioch College and then Director of the Clinic of the Cornell University Medical College. In 1924 he returned to Massachusetts to become Director of the Division of Communicable Diseases of the State Department of Public Health, serving under Commissioner Eugene Kelley. Upon the death of Dr. Kelley in 1925, Governor Fuller appointed Dr. Bigelow Health Commissioner.

In the Director's report for 1933, Dr. Washburn speaks as follows:

> The Trustees, after much thought, selected for the new Director of the Hospital, Dr. George H. Bigelow, who, in order to accept the position, resigned as Commissioner of Public Health to the Commonwealth of Massachusetts. Dr. Bigelow is one of our own alumni. He is young enough to have many years of service to the Hospital. He has already established a place of distinction for himself in the community. He is an authority on public health. Dr. Bigelow came to the Hospital on October 1, 1933, and will assume the responsibilities of his new office on February 23, 1934. He is accepting a great, honorable and responsible position. The Director wishes him success and Godspeed.

Dr. Bigelow assumed the office of Director on February 23, 1934. The hope that he had many years to serve in this position was doomed to disappointment. His sudden death, after only nine months' service, was a blow to the Hospital. His unusually brilliant personality, his friendliness and sympathy, his fund of anecdote and story had endeared him to his associates. Dr. Bigelow introduced a new accounting system and made changes in the Dietary Department that placed the handling of food entirely under the Dietitian. His service was of too short duration to leave an impress upon the policy of the Hospital.

Dr. Norman C. Baker, First Assistant Director, was Acting Director until Dr. Bigelow's successor took office. After experience as Assistant to Dr. John M. Peters, Superintendent of the Rhode Island Hospital, and as Superintendent of the Newport Hospital, Dr. Baker came to the Massachusetts General Hospital in 1927. A sturdy, dependable, and able administrator, the Hospital was fortunate that his services were available to assume the burden at this critical time.

The Trustees then recalled to the Hospital Dr. Nathaniel W. Faxon, Director of the Strong Memorial Hospital of Rochester, New York, to become Director of the Massachusetts General Hospital. Dr. Faxon is a graduate of Harvard, 1902, of the Harvard Medical School, 1905, and of the Massachusetts General Hospital, 1906. He practiced in Stoughton, Mass., until the outbreak of the World War. As a First Lieutenant, Medical Reserve Corps, he went abroad with the American Expeditionary Forces, and by promotion reached the position of Major, M.C., U. S. Army. He saw active duty in command of Field Hospital No. 28, where he served with distinction. Upon muster out of the service he became First Assistant Resident Physician (Assistant Director) at the Massachusetts General Hospital, where he served from 1919 until 1922, when he was appointed Director of the Strong Memorial Hospital, Rochester, N. Y., the teaching hospital allied with the Medical School of the University of Rochester. The building now occupied by this hospital was to a considerable extent planned and erected by Dr. Faxon. He assumed office at the Massachusetts General Hospital on July 1, 1935, and entered upon his new duties with the large task immediately before him of planning and building the George Robert White Memorial Building at the General Hospital. Of the Assistant Directors inherited by Dr. Faxon, Dr. Engelbach went to the Cambridge Hospital in 1937, and Dr. Ragsdale in 1938 to Grand Rapids, Michigan, to become Superintendent of the Butterworth Hospital. Dr. Gerald F. Houser was added to the group in 1937.

Dr. Faxon begins his administration with the advantage of unanimity of choice in his selection, of familiarity with his job, and of experience in hospital administration since 1919. He has a great opportunity and great responsibility.

Uniform Accounting—Its Need and Value

WILLIAM A. DAWSON

ACCOUNTING knowledge is not the most important qualification an administrator should have. The outstanding characteristic a hospital administrator should have is an understanding sympathy—which enables him to meet the varied problems in a hospital and effect a solution of them.

But what has sympathy to do with hospital accounting?

A balanced budget is an accomplishment, but it should not be attained through the sacrifice of sufficient hospital or medical care. If it is the result of inadequate care of patients then a balanced budget is nothing of which to be proud. On the other hand if the budget of the hospital has been unbalanced through errors of administration then, surely, the administrator should know the contributing factors.

In order to learn these factors he must have a means to measure. To measure he must have a guide. To have a guide he must have comparable figures. To have comparable figures he must have uniform accounting. It is only by the use of uniform accounting procedures that the figures of each hospital can be brought in sympathy with those of all other hospitals.

The United Hospital Fund of New York, which I have the privilege to represent, has achieved uniform financial and statistical reports for its 93 member voluntary hospitals. The information available to directors on a comparable basis has been very helpful—not only from an administrative viewpoint but as a means of appealing to the philanthropically minded public, and for the equitable distribution of funds contributed by the public.

The logical question is—What is the Fund System? The impression seems to be that it is something mysterious and that the records must be kept in accordance with the dictates of the Fund. The Fund could not possibly dictate as to how books of accounting should be kept.

The Fund does make recommendations as to methods. These recommendations are: (1) That the hospitals adopt the accrual system of bookkeeping in place of the cash system; (2) that the hospitals adopt a uniform classification of accounts; and (3) that the hospitals compile accurate statistics.

The Author

● **William A. Dawson is an authority on hospital accounting and is Consulting Accountant of the United Hospital Fund, New York City.**

We must recognize that a hospital is a business as it pertains to its operations. I believe the trustees, who generally are business men, will agree that business methods are necessary. Is any commercial business conducted on a cash basis? I do not think so because the cash method would not produce the true financial condition of the business; neither will it in a hospital.

The only income and expense basis of value to a business administrator, and the only method on which income and costs can be correctly related is the accrual system of bookkeeping.

The standardization of account classification is recognized as an important step in the administration of the hospitals. If we are to produce comparable operating results so as to benefit by each other's experiences, we must all talk the same language.

The compiling of accurate statistics is quite necessary. Financial results tell only part of the story. Statistics complete it. Financial results mean little unless they are measured by units of service. Statistics are the units of service. They should be correct.

And now let me explain how a uniform hospital financial and statistical report is produced.

Fundamentally, there is little difference in the accounting between large and small hospitals, east and west, or north and south. They all have bed and board, and the special services, in general, are the same.

It makes no difference what system of books and records you keep, you can still produce comparable operating figures. Of course, the accrual system and a standard classification of accounts make the job much easier and more dependable.

Last April, I spoke at the Tri-State Conference in Columbus, South Carolina. In order to show

Presented at the New England Hospital Association convention, Boston, Mass., March 10, 1939.

that the books and records of a hospital would not defeat the writing of the United Hospital Fund form of report, I took as my illustration the Tuomey Hospital in Sumter, South Carolina. I had never seen the hospital. I had a copy of the institution's application for assistance to the Duke Endowment and the measurements of the various departments of the hospital. If a report could have been written under those conditions then, surely, it can be written by any hospital accountant.

Through the courtesy of Dr. Wilinsky, Director of the Beth Israel Hospital of Boston, for whom we wrote the report I am using, I will attempt to tell you some things you do not know about a hospital. The report is for the year of 1938.

Balance Sheet

Our form of balance sheet is set up in four sections. I will describe them briefly:

Section 1—General Fund Assets and Liabilities

The general fund is recognized as the superintendent's balance sheet. The current assets and current liabilities are recorded in the general fund section. The difference between current assets and liabilities is working capital.

Section 2—Temporary Funds for Designated Purposes

In this section is recorded money, securities and other resources given for certain specific purposes to the hospital, the principal of which, as well as the income thereon, may be used as designated. The total of such funds is offset by a reserve for temporary funds for designated purposes.

Section 3—Permanent Funds

Permanent funds are endowment funds and consist of cash, securities, and other resources given as a trust to the hospital and are the resources permanently set aside by the hospital board, the principal of which is to be kept permanently and only the income may be used. Permanent funds are offset by a reserve for permanent funds. The reserve for permanent funds is recorded as: "Designated by Donors," and "Not Designated by Donors." The reason for this breakdown is that often the board, by action within itself, creates endowments from unrestricted funds. When gifts are received without condition, the principal as well as the income may be used. They are not endowments. Only the donor can restrict funds. They are really part of the general funds. They are available and can be used when necessary. The Board can always reverse the action which made such gifts endowment funds. It is therefore important to know the amount of unrestricted funds available.

Section 4—Plant Assets and Liabilities

The plant assets are land, buildings, equipment, radium, and plant funds.

Plant funds are made up of cash, securities and other resources given to or set aside by the hospital board for the purchase of hospital properties, i.e., land, buildings, equipment, radium and construction. The funds are temporary, for a designated purpose, but differ from other funds of this class in that the use of them creates capital assets.

The offset to plant assets is plant capital, plant reserves and plant liabilities. Plant capital represents the amount invested in the properties; the equity in the plant. Reserves consist of depreciation and plant funds. The liabilities are the capital indebtedness, i.e., bonds, mortgages, buildings and equipment, and notes and accounts payable.

Why have we adopted this form of balance sheet? Our experience is that nearly all people are commercially minded. Hospital accountants and many public accountants set up a commercial balance sheet for a hospital. Such a balance sheet establishes a capital or surplus account.

Let me explain by reading from a letter I wrote why such a capital or surplus account is incorrect for a hospital.

Last October Dr. Wilinsky sent me a balance sheet and asked for comment. My answer was as follows:

"In your balance sheet you establish a capital account of $1,801,511.10. You indicate that the institution has a surplus. You and I know that no voluntary hospital operating at a loss could possibly have a surplus. If you analyze your capital account you will find it represents the equity in buildings and equipment, and you can't operate a hospital on equity in the plant. You will find that the equity has been charged with approximately $381,000 of operating losses. How can you charge equity with operating losses?

"What an administrator of a hospital is interested in is: how much have we got to keep the hospital operating? In other words, what is the working capital? You will note that you have no surplus but you have a working capital deficit of $382,956.27, and the expla-

nation is embodied in your general fund assets and liabilities.

"The establishment of a capital or surplus account is misleading to you, the board and those who help support the hospital. If you were a charitable contributor and saw a hospital had a surplus of $1,800,000, what would you say?"

Dr. Wilinsky has no surplus but has a deficit in working capital of $181,192.50 as of December 31, 1938.

Hospital and General Fund Income

I will next explain the distribution of hospital and general fund income. This statement is divided into two sections: One section for earnings from hospital services, and the other for income other than earned from patient services such as donations, investment income and like.

Income from patient services is distributed to the services from which it was earned. Bed and board by classification of patients, out-patients, private ambulatory patients (you call them emergency ward patients), research, education, operating rooms, delivery rooms, x-ray, laboratory, ambulance, and other special services. The classification of income accounts is no different from what every hospital should have.

We record earned income by services. Earned income is the income earned if all patients paid the standard rates. Earned income is the earning capacity of the hospital based on service rendered.

We record allowances by services. By subtracting allowances from earned income or earning capacity, we have net income and for each type of service.

Let me dwell a few minutes on allowances. Allowances, as they apply to hospitals, are the adjustment of the established charges in effect for services to patients. Allowances are generally made because of the inability of patients to pay, or for those who are entitled to courtesies. Allowances are not free care because the standard rates are not based on cost. I will explain later how free care is determined.

But why record allowances? Should we not take what the patient can pay and forget the rest? Why all this fancy bookkeeping? If we fall short of the funds expended for the operation of the hospital we can pass it on to charitable friends, the public, the community chest, or other charity to make up the difference.

Allowances are made on the approval and authority of the administrator. He has absolute control over the hospital revenue. To him is allotted the authority to give away more of the institution's earniny capacity than is the privilege of the entire board of trustees. Many administrators do not know the amount of the allowances they have made and many boards have never given thought to the subject.

Administrators criticize department heads concerning the operation of their departments when they themselves are somewhat to blame because of the allowances they have made. But why bother about recording allowances?

If you do not bother it is because you have failed to realize the importance of revenue accounting. You have no revenue policy.

The greatest safeguard is a well organized policy of assessing and collecting. Such a policy necessitates a complete control of earning capacity.

A strict control of earning capacity possesses advantages. It safeguards the institution from within and without. It is effective with the hospital staff and patients. It reduces excessive free care. It eliminates carelessness and disinterest by the staff in the financial welfare of the hospital.

The greatest advantage of proper revenue records comes from correct association of income and expense, of earning capacity to spending capacity. This is the keystone of good business management. It is practically useless to maintain a careful analysis of expense unless it can be brought into proper relationship with income.

It is extremely difficult to improve your financial condition until earnings and allowances are known.

The non-recording of allowances is a concealment of an important operating function. It leaves the superintendent and the board in the dark regarding a vital phase in the hospital operations.

Did you ever know of a commercial organization which did not record its discounts? To operate a hospital you should know its earning capacity and the discounts it makes.

Recording the Income of a Hospital

And now to give you an idea of how this hospital's income is recorded in the report. I am not going to quote many of the figures produced but just enough so that you will get an idea of the method followed.

The earning capacity, which includes bed and board and all special services, based on the serv-

ice units rendered, was $459,581. This would be the income if all patients had paid standard rates. The allowances were $132,799. And remember allowances are not free care. We show earned income or earning capacity for bed, board and routine services by classification of patients, and by special services. Of course, by subtracting allowances from earned income we produced net income.

As an illustration, I give you the ward figures: Earned income, $110,694; allowances, $71,711; net income, $38,983. I ask that you remember the allowances, $71,711. I will use this figure again in explaining free care.

Next we take income from bed and board by classification of patients and add to it the income from special services. The result is the combined income by classification of patients.

As I will use the figures in this statement later, I will not present them now. You may nevertheless feel assured that I have every income figure for which you could ask.

Statement of General Fund Expenses

The next schedule is the statement of general fund expenses. Every institution compiles an expense account. The list (chart of accounts) of general fund expenses makes possible comparisons with different periods, departments, and other institutions. The titles of accounts are the accepted standard. Only by the use of a standard form can comparable results be obtained. When the hospital figures are applied to this expense statement, your system of bookkeeping plays no part. You could now throw your books away and produce comparable costs. The figures on this expense report (the direct expenses) are the base for the determination of costs.

In a hospital each department is related to all other departments. To properly allocate the cost of patient services rendered, it is necessary to apportion the direct departmental expenses. Each department must be treated as a separate entity; that is, as if operating as a separate company performing all the services itself which are performed for it by other departments. This requires the application of indirect expense to the direct expense.

The figures I will now present are departmental costs, not service costs. We must first know what the departments cost before we can determine what the services cost. We must establish costs for both the revenue producing departments and non-revenue producing departments.

To do this we use a work sheet for the distribution of indirect expense. By the use of related statistical bases, the departments are charged with the indirect expenses. Let us look at some of the figures:

Administrative Cost. The Direct Expenses are: salaries, $44,595; other expenses, $16,621. Total Direct Expenses, $61,216. To this amount we add the Indirect Expenses: housekeeping, $1,322; ordinary repairs, $1,256; heat and light, $1,861; laundry, $34; meals, $4,246. Total Indirect Expenses, $8,719. Therefore, the administrative department cost $69,935 and not $61,216, as shown by the Direct Expenses.

Let us look at *Nurses' Living Quarters,* meaning the cost of maintaining nurses living in. Direct Expenses, $3,214. Indirect Expenses: administrative, $612; housekeeping, $4,877; repairs, $4,633; heat and light, $6,864; laundry and linen, $1,505; meals, $24,575. Total Indirect Expenses, $43,066. Total cost of maintaining nurses living in, $46,280.

Meals—Direct Expenses: salaries, $33,684; raw food, $84,640; other expense, $9,205. Total Direct Expenses, $127,529. Indirect Expenses: administrative, $6,428; housekeeping, $2,401; repairs, $2,280; heat and light, $3,379; laundry and linen, $1,257. Total Indirect Expenses, $15,745. The total cost of meals, $143,274 and not $127,529 the Direct Expenses. I will tell you more about the cost of meals later.

The School of Nursing—Direct Expenses, $5,083; Indirect Expenses: administrative, $802; housekeeping, $1,105; repairs, $1,049; heat and light, $1,554; laundry, $89. Total Indirect Expenses, $4,599. Total cost of the school of nursing, $9,682. Later I will tell you the cost of educating a nurse.

We have similar figures for all departments. Just a few more.

Operating Rooms—Direct Expenses, $21,455; Indirect Expenses, $8,031. Total cost of operating rooms, $29,486. This is not the cost of operating room services.

Emergency Ward—Direct Expenses, $3,124; Indirect Expenses, $3,673. Total cost, $6,797.

Ambulance—Direct Expenses, $1,840; Indirect Expenses, $1,320. Total cost, $3,160.

There are many more departments and costs but I think you now have an idea of what can be produced.

How much does it cost to clean the wards? $3,163; the private rooms? $3,262.

Heat and Light: wards, $4,450; semi-private rooms, $4,291.

Laundry: private patients, $3,874; ward patients, $5,786.

Meals: private patients, $10,653; semi-private patients, $15,365; ward, $19,522. I will tell you more about the cost of meals later and also many other interesting figures.

When departmental costs have been determined, the next step is to establish service costs. To determine service costs a portion of the undistributed non-revenue producing departments' expenses must be applied to services. It is clear and logical that the services must absorb all expense. Again, by the use of related statistical bases, the service costs are produced.

Apportionment of Comparable Expense to Service

The statement is called Apportionment of Comparable Expense to Services. Herein are produced the costs of bed and board by classification of patients, out-patient admissions, and all special services. By applying the cost of special services to the cost of bed and board and out-patient department admissions, the combined costs by classification of patients are determined.

I will not give you the figures, as I will use them in explaining the next section of this report.

With the income distributed and having arrived at the costs of the various services, we will put income and costs together and review the operating results.

As the figures we have arrived at can be compared with all hospitals in New York City, I will give you some of the average figures of 55 New York general hospitals for comparison.

Private Patients—We have 9,467 private days. The income from bed and board was $94,469. The cost, $74,623; the profit, $19,845. The average income per day for bed and board was $9.98; the cost, $7.88; the profit, $2.10 per day.

For combined services to private patients the income was $124,210; the cost, $91,582; the profit, $32,628. The average income per day for combined services was $13.12; the cost, $9.67; the profit, $3.45. The average income for New York hospitals is $11.74; cost, $8.26; profit, $3.48.

We had 1,040 private patients. They paid an average of $119.43 and the cost was $88.06, or an average profit per private patient of $31.37. The average stay was 9.3 days.

Semi-private Patients—There were 21,374 semi-private days. The income for bed and board was $109,099; the cost, $115,811; the loss on bed and board for semi-private patients, $6,711. The average income per day, $5.10; the cost, $5.42; the loss, $.32 per day for bed and board.

The combined income for semi-private patients was $146,868; the cost, $147,359; the loss, $491. You will note that the special services absorbed most of the loss on bed and board. The average income per day for combined services was $6.87; the cost, $6.89; the loss, $.02 per day. The New York averages were: income, $7.22; cost, $6.44; profit, $.78.

We had 2,255 semi-private patients who paid an average of $65.13; cost, $65.35, and an average loss on each semi-private patient of $.22. The average stay was 9.6 days.

Ward Patients—We had 31,960 days. The income for bed and board was $39,572; the cost, $145,683; the loss, $106,111. The average income per day for bed and board was $1.24; the cost, $4.56; the loss, $3.32.

For Combined Services—Income, $61,438; cost, $189,321; loss, $127,882. The averages per day: income, $1.92; cost, $5.92; loss, $4.00. The New York averages were: income, $2.93; cost, $5.95; loss, $3.02.

We had 3,178 ward patients who paid an average of $19.33 at a cost of $59.57 and a loss of $40.24. The average stay was 10.3 days.

All In-patients—Total days, 62,801; income for bed and board, $243,142; cost, $336,118; loss, $92,976. Average income, $3.87; cost, $5.35; loss, $1.48 per day. For combined services, all in-patients: income, $332,516; cost, $428,262; loss, $95,745. Average income, $5.29; average cost, $6.82; average loss per day, $1.53. The New York average cost was $6.39.

We had 6,473 patients. They paid an average of $51.37; the cost, $66.16; the loss, $14.79. The average stay was 9.9 days.

Out-patients—We had 67,037 visits. Income from admissions, $19,916; cost before special services, $65,709; the loss, $45,793. The average admission fee was $.30; the cost, $.98; the loss, $.68.

For Combined Services—Income, $27,743; cost, $95,276; loss, $67,533. The average income per visit, $.41; cost, $1.42; loss, $1.01. The New York averages were: income, $.50; cost, $1.10; loss, $.60.

We had 11,726 out-patients who paid an average of $2.37; cost, $8.12; the loss per out-patient, $5.75. They averaged 5.7 visits.

Emergency Ward Patients—We had 4,075 vis-

its. The income was $8,085; the cost, $18,429; the loss, $10,345. This was an average income per visit of $1.98; a cost of $4.52, and a loss of $2.54 per visit.

Operating Room Services—We had 4,472 operations. The income, $30,449; the cost, $45,459; the loss, $15,010. The average income per operation, $6.81; cost, $10.17; loss, $3.36. The New York figures: average income, $6.93; cost, $12.31; loss, $5.38.

Let us take the operating rooms service costs apart and see what makes up the cost of one operation:

OPERATING ROOMS SERVICE COSTS

	Total Costs	*Cost of 1 Operation*
Direct Expenses:		
Salaries	$ 8,495.76	$ 1.899
Supplies	12,959.50	2.898
Total Direct Expenses	$21,455.26	$ 4.797
Indirect Expenses:		
Administrative	$ 1,622.23	$ .362
Housekeeping	895.34	.201
Repairs	850.34	.191
Heat and Light	1,260.00	.282
Laundry and Linen	3,402.99	.761
Total Indirect Expenses	$ 8,030.90	$ 1.797
Total Operating Rooms Cost	$29,486.16	$ 6.594
Non-service Departmental Expense applicable	$15,973.42	$ 3.572
Total Operating Rooms Service Cost	$45,459.58	$10.166

X-Rays—There were 26,583 films. The income was $27,376; cost, $39,947; loss, $12,571. There was an average income of $1.03; cost, $1.50; loss, $.47. New York figures: income, $1.58; cost, $1.64; loss, $.06.

Laboratory—We had 69,136 examinations. The income was $18,395; the cost, $36,040; loss, $17,645. The average income per examination, $.27; cost, $.52; loss, $.25. The New York averages: income, $.47; cost, $.63; loss, $.16.

Cardiology—There were 1,567 examinations. The income was $1,712; cost, $1,190; profit, $522; average income, $1.09; cost, $.76; profit, $.33.

Ambulance—There were 465 trips. The income was $1,433; cost, $3,634; loss, $2,201; average income per trip, $3.08; cost, $7.82; loss $4.74.

Nursing Care—The cost of nursing care was $148,226. The amount is made up of direct and indirect expense of nurses' living quarters, $46,282; nursing care, $92,260, and the school of nursing, $9,683. We had 62,801 in-patient days—therefore, the average cost for nursing care per in-patient day was $2.36. The New York average is $2.29. For private patients the average cost per day was (not including special nurses) $2.95; semi-private, $2.52; ward, $1.71.

Laundry—We had 1,006,926 pounds at a cost of $25,695.78, or an average cost per pound of $.025. The New York average is $.0295.

Maintenance of Nurses—The cost of maintenance of nurses was $46,282. There were 103 nurses living in. The average cost per nurse was $449.34. The New York average was $424.25.

I promised to tell you the cost of educating a nurse. The cost of the school of nursing was $9,683.32. We had 85 students—therefore, the average cost of schooling was $113.92. The average cost of maintenance was $449.34, thus the average annual cost of educating a nurse, $563.26. This average cost does not take into consideration the compensating nursing service credit of students, nor does it include depreciation of building or equipment. Personally, I am in favor of recording depreciation as an operating expense, but as all hospitals have not got around to this idea as yet and we wish to produce comparable costs, it is therefore not included.

The cost of educating a nurse does include, for both the school of nursing and the maintenance of students, expense of administration, housekeeping, repairs, light and heat, laundry, linen, meals, instructors, books, supplies, class room expense and all other direct and indirect expenses.

Interns and others living in cost an average of $363.05 for maintenance.

Meals—We served 540,879 meals at a cost of $143,275, or an average cost of $.264. The New York average is $.254.

WHAT MADE UP THE COST OF A MEAL

	Total Cost	*Cost of 1 Meal*
Direct Expenses:		
Salaries	$ 33,684	$ .062
Raw Food	84,640	.156
Supplies, etc.	9,205	.017
Total Direct Expenses	$127,529	$ .235
Indirect Expenses:		
Administrative	$ 6,428	$ .012
Housekeeping	2,401	.005
Ordinary Repairs	2,280	.004
Heat and Light	3,379	.006
Laundry and Linen	1,257	.002
Total Indirect Expenses	$ 15,745	$ .029
Total Cost of Meals	$143,274	$ .264

Private Patients' Meals—We served 27,562 meals: Raw food cost, $8,463; other direct expenses, $2,190; indirect expenses, $803. Total cost of meals for private patients, $11,456. Average raw food cost, $.307; average total cost, which includes private patients' direct and indirect expenses, $.415.

Semi-private Patients' Meals—Semi-private patients average raw food cost, $.146; total cost, $.255.

Ward Patients' Meals—Ward patients average raw food cost, $.120; total cost, $.229.

The patients must absorb the cost of all personnel meals—therefore, the average cost of meals per patient, based on the total meal cost, was: private, $1.164; semi-private, $.714; ward, $.641.

Hospital Occupancy

The hospital had an occupancy in private rooms of 74.1 per cent; semi-private, 83.6 per cent; ward, 89.3 per cent; entire hospital, 84.7 per cent.

The personnel totals 429, of whom 131 live in. The report breaks these figures down by departments and positions.

The admissions totalled 6,473, of whom 233 were between 2 and 12 years; 6,060 were over 12 years. They were classified as: private, 1,013; semi-private, 2,208; ward: pay and part-pay, 1,738; free, 1,341.

The in-patient days were: private, 9,467; semi-private, 21,374; ward: pay and part-pay, 18,771; free, 13,189; total ward, 31,960; total all, 62,801. They also had 1,581 days in the emergency ward.

Out-Patients: Individuals, 11,726; free visits, 31,145; pay and part-pay, 35,892; total visits, 78,763.

Deaths: Sixty-three within 48 hours of admission, 177 other deaths; total, 240.

Visiting Staff: Hospital and out-patient department, 177; hospital only, 38; total, 215.

If there is anything you would like to know about this hospital, I think I can find the answer in this report.

I promised to tell you how free care is arrived at, so I will explain the procedure and also how much free care Beth Israel Hospital gave in 1938.

Free Care

Free care should only be recognized in the wards and clinics. Why? The private patient is private because he can afford to pay. A hospital should have an operating profit for services to private patients.

Those who contribute to your hospitals do so to help those who cannot afford to pay. They are not supporting deficits. Deficits may be the result of poor management. Those who cannot afford to pay are ward and clinic patients.

Beth Israel Hospital had an income from combined services to ward patients of $61,438.31 and the cost of the services to ward patients was $189,320.74. The loss of $127,882.43 represents the cost of free care in the ward. The allowances were $71,711.78, so the free care in the ward exceeded the allowances. Why? Because the selling prices (standard rates) are not based on cost.

How many free days did the hospital give? The records say 13,189.

We arrive at the number of free days as follows:

Ward Combined Income	$61,438.31
Divided by Average Ward Cost per Day	5.92
Equals the Number of Days Paid for at Cost	10,378
The Paid Days subtracted from the Total Ward Days	33,541
Equals the Free Days for which Nothing was Paid	23,163

Under this procedure the part paid days are recognized. All ward patients get some free care even though they pay full rates. They do not pay cost.

The free care in the out-patient department amounted to $67,533; allowances, $13,631.17.

How many free clinic visits were there?

Out-Patient Department Income	$27,742.94
Divided by Average Cost per Visit	1.42
Equals Visits Paid for at Cost	19,537
The Paid Visits subtracted from the Total Visits	67,037
Equals the Free Visits for which Nothing was Paid	47,500

The hospital records show free visits as 31,145.

The total cost of free care in the ward was $127,882.43. In the out-patient department it was $67,532.67, or a total of $195,415.10 and not the amount of the allowances, $85,342.95.

The hospital also gave free care to semi-private patients to the extent of $491; emergency ward patients, $10,345. Thus the total amount of free care to all patients was $206,251.

It might be well to tell you that research work was subsidized to the extent of $33,713. The cost was $35,725, which means that the hospital had to stand the difference of $2,012 for this research work, which I understand was to be paid for in its entirety.

Without proper accounting and statistical records you cannot produce the answers to the questions I have answered. You are operating in the dark. You are handicapping the charitable and fund-raising organizations in making an equitable distribution of money.

Community chests should be distributed on a basis of free care given—not on anticipated deficits. Even you and I cannot anticipate our financial condition for the year. Budgets are not facts. Free care rendered is a fact. An equitable distribution, one that will satisfy everybody because it can be proved and supported, must be based on facts. Only uniform accounting will produce comparable facts.

1 Uniform accounting will provide each hospital administrator with an analysis of the operations of his own hospital.

2 Uniform accounting will make possible the exchange of comparable income, costs, and statistics among hospitals.

3 Uniform accounting will provide the necessary facts with which to arouse the public interest in the hospitals.

4 Uniform accounting will provide the basis for an equitable distribution of community funds.

During the last few years great advances have been made in hospital accounting. This advancement is the result of the cooperation of many hospitals.

Definitely, there is a need for and a value in Uniform Accounting.

Ratios of Administration Costs to per Patient Day Costs

COMPARING various functional department expense per patient day in various hospitals is very difficult because of the different accounting procedures in use.

The official Accounting Manuals of the American Hospital Association, the United Hospital Fund of New York City, and the Cleveland Hospital Council give the approved accounting set ups and all hospitals are urged to keep their books accordingly. Unfortunately, however, relatively few hospitals have adopted the standard recommended methods.

In the official American Hospital Manual of Accounting and in the New York City and Cleveland set-ups the following items are to be charged to the Administration Account:

Director's office
Assistant Directors
Purchasing Department
Admitting Department
Cashier Department
Credit and Collection Department
Bookkeeping, Cost Accounting and Statistics
Information Clerks and Hostesses
Visiting Card Clerks
Visitors Monitors
Printing Shop
Stockkeeping, Issuing and Receiving Department
Messenger Service
Telephone and telegraph
All insurance and bonding costs

Following is a list of these hospitals with their known administrative costs:

Hospital	*No. of Beds*	*Admin. Costs per Pat. Day*
Huron Road, Cleveland	256	0.89
Mt. Sinai, Cleveland	270	0.84
St. Johns, Cleveland (Catholic Sisters)	214	0.72
St. Luke's, Cleveland	391	0.84
St. Vincent's, Cleveland (Catholic Sisters)	290	0.59
University, Cleveland	816	0.85*
Brooklyn, Brooklyn	366	0.80
Jewish, Brooklyn	540	0.87
Lenox Hill, New York City	541	0.60
Mt. Sinai, New York City	857	0.94
Roosevelt, New York City	384	0.84
St. Luke's, New York City	469	0.96
St. Vincent's, New York City (Catholic Sisters)	421	0.63
Presbyterian, New York City	901	1.54*
New York, New York City	823	1.33*
Long Island College, Brooklyn	426	0.65*
Johns Hopkins, Baltimore	954	0.62*
Strong Memorial & Rochester Municipal, Rochester, New York	657	0.62*
New Haven General, New Haven, Connecticut	560	0.96*
Peter Bent Brigham, Boston, Massachusetts	247	0.74
Albany Hospital, Albany, New York	633	0.60*
Memorial Hospital, Albany, New York	135	0.77
Ellis Hospital, Schenectady, New York	251	0.42
Samaritan Hospital, Troy, New York	165	0.46

*Teaching Hospital for a Medical School

Data for New York City hospitals from United Hospital Fund of New York City. Data for Cleveland hospitals from Cleveland Hospital Council. Data for remaining hospitals from their Annual Report or special letter from director of the hospital.

E. W. Jones, Director,
Albany Hospital, Albany, New York

That Changing Hospital Dollar

H. E. HESS, D.D.

IF THE hospital operating dollar were a good juicy pie and we could cut it as we like, hospital administration would be all fun. But whether we like it or not, trends and economic conditions control the knife and cut the slices to meet their demands.

My first interest in the partition of the hospital operating dollar started with the November 1937 issue of *HOSPITALS*, page 21, "The Hospital Operating Dollar," (right hand diagram in our case). The operating dollar is a unit flexible enough to cover any good system of accounting as well as departmental variations due to geographical and labor conditions. It gives a relative picture quickly grasped by hospital governing boards.

A study of our hospital dollar over the four-year period 1935 to 1938 was most revealing to our Board of Trustees no less than the administration. To this end we shall observe: (1) the division of our operating dollar for each year of this period, and (2) some trends definitely revealed by the changing divisions.

The Operating Dollar

The figures of each division were acquired by comptometer calculations. The small variations due to the comptometer reciprocal were so distributed that no item was affected by more than the hundredth part of a cent.

The hospital contains 200 beds—160 adult, 16 children and 24 bassinets. Average occupancy was 103 in 1935 and increased to 110 (6.8 per cent) in 1938. Continued serious drouth in Nebraska for five years has made increase of occupancy slower than otherwise. As a consequence of the drouth, Federal subsidies to farmers have benefited us much less than they have most of the agricultural sections.

Nebraska Methodist Hospital

THE OPERATING DOLLAR

Departments Showing Gains	*1935*	*1936*	*1937*	*1938*
1 Surgery	5.21	5.86	6.32	6.36
2 Pharmacy	2.75	2.69	2.81	3.20
3 Anesthesia	1.59	1.71	1.76	1.90
4 X-ray	5.33	4.70	4.55	4.17
5 Pathology	2.70	3.02	4.86	5.27
	17.58	17.98	20.30	20.90

The Author

● **Dr. H. E. Hess is President of the Association of Hospitals, Homes and Deaconess Work of the Methodist Episcopal Church and Superintendent of the Nebraska Methodist Hospital, Omaha, Nebraska.**

Departments Incidental to Administration	*1935*	*1936*	*1937*	*1938*
1 Administration	4.33	4.94	4.93	4.45
2 Accounting	1.41	1.52	1.46	1.37
3 Registration and Collection	2.34	1.70	1.24	1.01
4 Information and Telephone	1.62	1.64	1.50	1.42
5 Housekeeping	5.20	5.41	4.38	4.29
6 Laundry	3.48	3.55	3.60	3.49
7 Purchase and Issuance	1.64	1.70	1.85	1.82
8 Maintenance and Repairs	6.00	5.30	4.67	4.09
9 Maintenance and Grounds	.19	.24	.26	.30
10 Medical and Surgical	1.02	1.21	1.05	1.30
11 Medical Record	.24	.23	.26	.23
12 Heat, Light, Power	10.95	10.63	9.53	8.80
13 Dietary	7.75	8.13	8.28	7.91
14 Foods	18.64	17.98	17.17	17.23
Total Dietary, 13 and 14	26.39	26.11	25.45	25.14
	64.81	64.18	60.18	57.71

Nursing Costs	*1935*	*1936*	*1937*	*1938*
1 Maintenance Nurses' Home	1.80	1.79	1.62	1.72
2 Nursing Care	14.09	13.78	16.19	17.33
3 Training School	1.72	2.27	1.71	2.34
Total Nursing Costs, Items 1, 2, 3	17.61	17.84	19.52	21.39
Grand Totals	$1.00	$1.00	$1.00	$1.00

Nearly all of the items show natural variations due to increased occupancy and commodity fluctuations. Some items, however, show definite trends which we now consider.

Surgery

In the first group Surgery increased 1.15 cents of the operating dollar, due to an increased surgical staff and the adding of two more operating rooms requiring more graduate nurses. This does not enter into our Nursing Care costs, but very definitely is related to its increased costs.

Pathology

In Pathology expenses increased from 2.7 cents to 5.27 cents of the operating dollar, which is an increase of 2.57 cents. February 1, 1937, a full-time registered pathologist joined our resident staff. Under his skill, Services Rendered increased 56 per cent in 1938 over 1935, while expenses of the department jumped 79 per cent. Expenses thus expanded 23 per cent faster than Services Rendered. The last full year when Pathology was in charge of a practicing internist of excellent training was 1936. The operating cost increased in 1937 over 1936 by 1.84 cents, which was an increase of nearly 81 per cent in operating costs of the department. Service Rendered Trends indicate that two more years may absorb the 23 per cent differential. This was to be expected and fully desirable. Good pathological service in any hospital, when built around a registered pathologist, must have three to five years minimum to build up the department.

Heat, Light, and Power

Heat, Light, and Power decreases are due to the installation of stokers in the three boilers and a small reduction granted in electric rates. The stokers reduced fuel costs from 4.8 cents of the operating dollar in 1935 to 3.05 cents in 1938, a saving of 1.75 of a cent. The installation of a standard insulated thermostatically controlled cooking range in the fall of 1936 reduced gas bills one quarter of a cent, which amounted to a saving of $375.57 in 1938 over 1935, with better than ten per cent increase in number of meals.

Dietary and Foods

The procuring of a skilled and experienced dietician in 1936 accounts for the decrease of 1.25 cents in the two items of Dietary and Foods. The Dietary item covers salaries and supplies other than food and shows an increase of .16 of a cent, while careful planning of meals and elimination of waste decreased food costs by 1.41 cents. Savings were made in such items as butter, bread, cream, and foods in refrigerators. All untouched butter pads of both patients and employees are used for cooking. Untouched cream and leftover cream is boiled and permitted to sour, effecting considerable saving. Leftovers from refrigerators are carefully watched by the dietician and nothing wasted. Bread costs were cut $282.42 in 1938 over 1937 by serving one-half slice to patients and employees. Those wanting more bread can always have what they want. A surprisingly large number of persons will not eat over half a slice of bread regardless of how much is served. A skilled experienced dietician is a real investment to any hospital. An inefficient or inexperienced dietician can waste more than any other hospital employee.

Nursing and Nurse Education

Nursing costs are my real "headache." The training school is its cause. There seems to be little chance of meeting sharply increased costs here, other than passing it on to the student through higher tuitions. Endowments are out of the question. If one doubts this, just try to raise one. They can be raised with increasing difficulty for helpless children and worthy indigents, but endowments cannot be raised to help girls acquire a lucrative profession. Mr. Prospective Donor says, "They profit by their education. Why shouldn't they pay for it?" Well, why shouldn't they? I do not care how much the school costs, as long as it gives value received and *the student nurse pays the extra costs* of her education.

A glance at division three of our operating dollar tells the story. Nursing costs increased in 1938 by 3.78 cents over 1935 and 1.87 cents over 1937. In dollars our nursing costs, exclusive of surgery, are $1,006.72 per month (39 1/3 per cent) more than in 1935 and we have not met full requirements of the New Curriculum.

I believe the way out is forward. About a year ago we procured from the efficient nursing staff of the University of Minnesota Hospital Margaret L. Keeler as the capable director of our nursing and training school. Doctor Ray M. Amberg, superintendent of the Minnesota University Hospital, most graciously made possible her services for us. With her skilled leadership we have placed the school on a college rating and our graduates now receive two years of college credit.

If our one hundred students, including preclinics, cover the increased costs of their training under these standards they must pay an amount equal to the increased cost of $1,006.72 per month, which means better than $360.00 tuition, to which must be added the cost of books, uniforms, and hospital care. The class this fall is asked to pay $200.00, which is about half the extra cost. In two to three years we believe we can get an adequate tuition owing to our college rating. In the meantime we must take heavy losses, which at present are running the hospital decidedly in the red.

Can the old idea of an education for nothing, that prevailed in training schools of the past, be changed? Can training schools be placed on college standards of training and procure sufficient students on a high tuition basis? If not, the training school is doomed in the smaller private hospitals—at least, mine is.

Hospitals Day by Day—Some Pointed Paragraphs

WALTER E. LIST, M.D

THE controlling board of a hospital, preferably consisting exclusively of lay people, is dependent upon professional advice in matters touching clinical activities. The board will accept advice most readily when it is proffered by those in whom the greatest confidence is reposed, and it is therefore essential that in the organization of a medical advisory group, the board shall have complete freedom in the selection of its members. It is equally important that the members selected shall command the respect of the entire professional staff; that they shall be clinicians of character and attainment, regardless of age; and that the term of office shall be definitely fixed. To meet these essential conditions we recommend that hospital by-laws provide for a medical advisory council of seven members, five of whom shall be members of the staff, designated by the board, each to serve for five years, the members of the first council to have staggered terms of office so as to provide one vacancy each year. The remaining members should be the administrator of the hospital, acting as secretary, and the elected head of the organized staff, each ex-officio. The functions of this council should be clearly defined as a deliberative and advisory body with no executive or administrative powers.

William H. Walsh, M. D.

¶ The good will of the community is essential to hospital progress and you will enjoy state and national publicity on National Hospital Day, May 12; but the best results for your community and your hospital will come if you plan a program to tie into the general publicity throughout the United States and Canada and in leading cities of other nations.

Albert G. Hahn

¶ In the Army just as much attention is paid to the second line of defense as to the first. Many hospitals have paid too much attention to first line employees and have forgotten the second line in the kitchen, laundry, and furnace room.

A. F. Brandon, M. D.

¶ To the oft discussed question—Should a Hospital Administrator be lay or medical?—I should say that he may be either, providing that he recognizes the fact that his job is that of an Executive Social Worker in the Hospital branch of the field of health.

Maurice Dubin

¶ With the introduction of inner-spring construction and of molded sponge rubber into mattress manufacture, the hospital has two promising substitutes for the traditional "thirty pounds of curled horsehair." Periodic renovation of the hair mattress is a necessity. At such times it is easily possible and not prohibitively expensive to have it remade as an inner-spring mattress with utilization of the better portions of the horsehair filling, for the outer surfaces surrounding the springs. If there is any surplus of usable hair, it can be made up into horsehair pillows, which in many hospitals are routine equipment.

Patients, almost without exception, find the inner-spring mattresses more comfortable and more satisfactory in all respects. Durability of the inner-spring type is good. With springs of proper non-corroding metal these mattresses will undergo repeated steam sterilization without injury.

Sponge rubber mattresses are being increasingly used and, in test trials, the writer has found them to have many desirable and few unfavorable characteristics.

Is the hard, and eventually lump, all-hair mattress any longer justified in hospital practice?

C. W. Munger, M. D.

¶ Comparative food costs are almost as misleading as comparative hospital costs. What quality food is purchased? Is it so well cooked, prepared, and served as to eliminate waste and please the patients and others who are fed at the institution? Is it purchased in the most economical manner? Is it used to the best advantage? These and one hundred other questions can be answered by top notch dieticians who can save their meager salaries over and over and who should be paid on the basis of their ability to do these things well.

Sydney G. Davidson

¶ It is more pleasant to dwell upon our achievements and successes in hospital and medical work, but it is more fruitful to face the situation frankly and draw out for inspection and proper disposal the many oft hidden weaknesses from which probably no institution is entirely free.

Harvey Agnew, M. D.

¶ Complaints handled in a friendly way will make friends of hospital patients and relatives. If you disagree, try the ugly plan of constantly looking for an argument and you will find it

A. M. Calvin.

EDITORIAL COUNCIL

BERT W. CALDWELL, M.D.,

Editor

G. HARVEY AGNEW, M.D.,
Secy., Department of Hospital Service,
Canadian Medical Association
Toronto, Ont., Canada.

W. L. BABCOCK, M.D.,
Treasurer, Grace Hospital,
Detroit, Michigan.

ASA S. BACON,
Superintendent, Presbyterian Hospital,
Chicago, Illinois.

CAROLYN E. DAVIS,
Superintendent, King's Mountain Memorial
Hospital, Bristol, Virginia.

NATHANIEL W. FAXON, M.D.,
Director, Massachusetts General Hospital
Boston, Massachusetts.

S. R. D. HEWITT, M.B.,
Superintendent, St. John General Hospital,
St. John, N. B., Canada.

ROBERT JOLLY,
Superintendent, Memorial Hospital,
Houston, Texas.

WALTER E. LIST, M.D.,
Superintendent, Jewish Hospital,
Cincinnati, Ohio.

MALCOLM T. MacEACHERN, M.D.,
Associate Director,
American College of Surgeons,
Chicago, Illinois.

CHRISTOPHER G. PARNALL, M.D.,
Medical Director, Rochester General Hospital,
Rochester, New York.

JOHN E. RANSOM,
Assistant Director, Johns Hopkins Hospital,
Baltimore, Maryland.

WINFORD H. SMITH, M.D.,
Director, Johns Hopkins Hospital,
Baltimore, Maryland.

WILLIAM H. WALSH, M.D.,
Hospital Consultant,
Chicago, Illinois.

FREDERIC A. WASHBURN, M.D.,
Director, Cambridge Hospital,
Cambridge, Massachusetts.

EDITORIALS

Hospitals and the Social Security Act

The proposed amendments to extend the old age and unemployment provisions to religious, educational, and non-profit organizations and coverage for their employees will not be approved by the present Congress unless there is a decided reversal of sentiment among members of Congress.

In an executive meeting of the Ways and Means Committee to whom the proposed amendments to the present law were referred, the Committee unanimously decided that in any bill reported in respect to these exemptions, there will be no change in the existing law. The Committee has voted to defer any action at this session of Congress.

The hospitals recognized that they were confronted with the problem of old age benefits for their employees, but insisted that hospitals were not confronted with the unemployment problems; that a fairly constant number of people were gainfully employed by our institutions; that there was no important fluctuation in the number of employees; and that persons leaving the employ of the hospital do so of their own volition or for reasons of their own misconduct.

Studies are being made by, and proposals are being received from, reliable insurance companies to provide some formula at a reasonable cost whereby hospitals may voluntarily provide old age benefits of their employees reaching the retirement age. More and more our institutions are giving thought and study, as they should, toward making suitable provisions for their employees in their old age.

The Government Ownership of Hospitals

The role of Government in the ownership and operation of hospitals is becoming an increasingly important one. The 1938 statistics reveal that more than seventy per cent of the hospital beds in the entire country are in Government hospitals, or 815,136 out of a total of 1,161,380 beds. Approximately fifty per cent of these beds are in custodial and domicilary institutions. The remainder in general and special hospitals.

In 1933, the percentage was sixty-seven and eight tenths per cent or 694,473 out of a total of 1,027,146 beds.

In 1928, ten years ago, the percentage was approximately sixty-three and six-tenths per cent, or 567,440 out of a total of 892,940 beds.

The number of beds under ownership of the several political divisions is as follows for 1938: Federal institutions, 96,248; state, 541,297; county, 96,621; city, 75,180, and city and county, 9,808.

If the rate of increase for the past ten years is maintained, and it is more than probable that it will be maintained, ninety per cent of the hospital beds in this country will be owned and operated by governmental hospitals in 1965 or 1966.

By tradition and policy, tax supported institutions were built for the care of those who are indigent and unable to pay. In practice, however, we find that the Government hospitals receive fourteen per cent of the cost of their operation as income received from patients who are able to pay and who do pay for the service they receive. In voluntary hospitals, over the past several years, fifty-four per cent of the cost of operation was

received from patients for service received. Approximately, $92,000,000 is paid annually by patients for hospital service received in hospitals built and supported by taxation for the care of indigent patients.

Government is consistently increasing its material interests in hospitals, both as to capital investment and income.

Preparedness

In these days when the balance between peace and war hangs even, it would be well to think of what was done by certain hospitals in preparedness for the World War. As much as thirteen months before the United States entered the war, the Surgeon General of the U. S. Army authorized the directors or certain members of the staff of these hospitals to organize and enroll doctors, nurses, and others under the Red Cross as nuclei for army hospitals when they should be required. The Red Cross purchased the initial supplies. There was plenty of time to select the best working organization of doctors, with representatives of the special departments, laboratories, and x-ray. A chaplain was appointed, nurses were trained for their important positions in operating rooms and wards, and dietitians, apothecaries, and other employees representing the different hospital departments were selected and organized.

Major General Ireland, Chief Surgeon, A.E.F., and later Surgeon General of the Army, gives these hospitals thus formed large credit for the excellent job done by the Medical Department in the World War. To one who saw the haphazard assignments to the staff of army hospitals in the Spanish-American War, the difference was that between order and chaos, between effective care of the patient and great lack of care. The time would seem to be here for the larger hospitals again to cooperate with the Government and do their bit toward preparedness. It will do them no harm, even if we are fortunate enough to escape war.

It seems important that the Surgeon General's office should cooperate and fully recognize that a most important consideration is that the effectiveness of these hospitals depends largely upon their esprit de corps and the fact that the personnel know each other and are accustomed to acting together. Therefore units should, as far as possible, be kept together.

F. A. W.

Hospital Service in 1938

The Council of Medical Education and Hospitals of the American Medical Association has again rendered a conspicuous service to the hospital field in the publication of its 1938 "Survey of Hospital Service in the United States," in the issue of the Journal of March 11.

The statistical information is compiled with care. It gives as accurate an outline of hospital performance as is humanly possible to assemble. The comparative data for the past and for previous years show the growth and development of hospital service, its distribution, the educational performance of our hospitals, the growth in number and bed capacities of our institutions, and other valuable information.

Among the statistics that are most interesting and informative is the increase of 36,882 in the number of hospital beds, or 14,155 above the average of 24,667 beds per year for thirty years.

The total of registered hospitals is 6,166 with bed capacities of 1,161,380 beds and 56,747 bassinets. The hospitals admitted 9,421,075 patients, and 1,026,771 babies were born in these institutions, or 18 babies for every bassinet. One patient was admitted every 3.3 seconds during the year. One out of every 14 of the population was admitted as a bed patient in 1938. The total number of hospital days for all hospitals was 352,482,690 or 7,763,550 over 1937.

Of particular significance was the performance of the voluntary hospitals. These hospitals numbered 2,757 with a total bed capacity of 289,501, an average of 105 beds. They admitted 5,848,106 patients out of a total of 9,421,075 admissions for all hospitals and had an average daily census of 198,184 with an average stay in hospitals of 12.3 days.

A Problem in Personnel Maintenance

That good working and living conditions are important factors in securing efficient personnel has been appreciated for many years in hospitals in the metropolitan areas where competition with other fields of endeavor are strong. Hospitals in these areas consider good housing conditions, recreational facilities, and good food for hospital employees necessities—not luxuries.

Many small communities anxious to have a

good hospital, often do not understand why they cannot keep good nurses or why they have such constantly changing personnel. Hospitals in small communities wishing to attract well-trained, efficient personnel must learn that it is good business to pay adequate salaries to allow for good separate maintenance, or provide proper housing conditions within the hospital or, better still, in a separate building, where the surroundings will be happy and cheerful.

The strain and tension under which the hospital personnel are, from necessity, forced to work, soon take their toll if there is no relief from the sick-room atmosphere. We would be surprised to find business men and women forced to live in their office rooms, but the hospital personnel are often scattered in the less desirable rooms throughout the building, or crowded into quarters which are entirely inadequate for comfortable living.

It may be advisable for the board of trustees of many of our small hospitals to investigate the housing facilities for their hospital employees, and there they may find the answer to a constantly changing personnel. *C. D.*

Nurses' Aids

Hospitals in the United States employ a total of 260,278 women in their nursing services, distributed as follows: 5,257 hospitals employ 90,166 registered nurses; 4,859 hospitals employ 80,679 nurses' aids and attendants; and 1,512 hospitals have 82,188 student nurses in training. In addition, 7,245 practical nurses are employed.

The statistics are reported in the Hospital Service number of the *Journal of the American Medical Association* for the year 1938.

Of particular interest is the large group of nurses' aids and attendants which have come into the hospital picture in increasing numbers during the past few years. It is true that a large percentage of this class of employee is in the service of custodial and other eleemosynary institutions, but the majority of them are employed by general hospitals. They are the creation of the hospital and to a very large extent are the responsibility of the hospital as far as their continued employment and use is concerned.

These questions naturally follow:

What kind of training are they receiving for the performance of the duties assigned to them?

Who in the nursing department is in charge of their training?

Is their training well planned, adequate, and continued during their period of service?

What is their status in relation to the general and floor duty nurses?

What are their prospects of gainful employment when and as they leave the hospital service?

Is their use and employment a matter of expediency, or a continuing policy of our institutions?

In increasingly large numbers the women who are now employed and trained as nurses' aids are leaving the service of the hospitals and entering the field of employment as practical nurses. It is estimated that there are 125,000 practical nurses, either employed or seeking employment as practical nurses. Invariably they refer to their training as having been received in the hospitals in which they were employed as nurses' aids or attendants.

There have been isolated instances, relatively few in number, where prescribed courses of instruction and training for this class of employees have been instituted. If the continued use of nurses' aids is to be the policy of our institutions, it is the responsibility of the hospital to see that their training is complete and thorough enough to fit them for the proper discharge of their duties both in the hospital and the home.

The status and training of this new group of hospital employees is becoming a real problem, the solution of which the hospitals and the nursing profession must give early and careful consideration.

Operating Room Explosions

The frequency of explosions of respiratory anesthetics occurring in hospital operating rooms is a matter of growing concern to both surgeons and hospital administrators. In recent months no less than five explosions, attended with severe in-

jury or loss of life, have been reported in hospitals, all due to a static spark.

The highly explosive nature of some of our anesthetic gases, including cyclopropane, ethylene, or ether combinations, increases the hazards of accidents over the dangers of anesthetic gases in use several years ago.

Too great dependence must not be placed on metallic grounding. Such grounding protects only the piece of apparatus actually grounded, and may actually increase the hazard if brought near to any ungrounded object or person that may be a source of accumulated static. Surgeons, nurses, other personnel, or rubber shod equipment can accumulate static capable of producing an electric spark. In one of the five recent operating room explosions, the investigation placed the responsibility on static developed by friction of the anesthetist's clothing on the rubber cushion of the anesthetist's chair.

It is generally accepted that a relative humidity of sixty per cent provides adequate protection against the accumulation of static, and many hospitals are now installing air conditioning apparatus for this purpose. However well installed, the effectiveness of air conditioning depends on how carefully it is controlled to maintain the proper degree of humidity and sufficient air movement to prevent undue concentration of the explosive gases.

Investigators are studying methods of installing absorbers and protective screens around the anesthetic machines and the anesthetic field, which will greatly reduce, if not entirely eliminate, the spark hazard.

Certain it is that the inflammable anesthetics are here to stay. Even nitrous oxide ether is inflammable in certain mixtures, and the hospital which does not take adequate means to control the ignition hazards of the operating room is not "exercising due care and diligence" in the protection of its patients.

Hospital Visitors

In a community where a hospital council exists, what better service could it perform for the welfare of patients in the hospitals than to establish a well worked out educational program for the control of visitors for all the hospitals in the community to follow.

In an effort to "treat the public with a smile" the hospital personnel endeavors to handle each visitor with courteous consideration. But tact and diplomacy fail repeatedly when it is necessary to refuse anxious relatives or friends admittance to a patient's room, or to limit the number of visitors and the length of visits. Nurses and even doctors hesitate to be firm, and often against their better judgment permit insistent visitors to tax patients who need all the rest and quiet they can get to help conserve their strength.

Every hospital has regulations stipulating certain visiting hours for ward patients, part-pay patients, and private-room patients. Unfortunately, visiting hours are usually at the time when there is a minimum of nurses on duty. Those who are on duty do not have time to check visitors coming and going, and to ask a visitor to leave, once he is with a patient, may do the patient more harm than good.

The freedom of visiting in private rooms presents even more difficulties. It is not uncommon to find in a private room, where a "no visitor" sign is on the door, two, three, or four visitors sitting around talking and smoking. During meal time and rest periods, when a patient should be completely relaxed, he often is called upon to entertain visitors, and as he naturally feels he must act the part of a host, he must keep alert and active in mind. Neither the patient nor the visitor seems to be aware of how upsetting it is to the patient to have to tell many times in one day how he feels, how he sleeps, and how he is enjoying the food.

If one hospital in a community makes an attempt at a strict enforcement of visiting regulations, even though it is done for the welfare of the patient, it may cause patients to look to other hospitals where there is more freedom and laxity in the visiting. If all hospitals agree on a strict enforcement much good can be accomplished.

By means of the radio, leaflets, and the press, the community should be brought to the realization that visiting the patient in a hospital may be misdirected sympathy which taxes the strength of the patient and retards his speedy recovery.

W. E. L.

An Approach to the Hospital Personnel Problem

JAMES A. HAMILTON

The Author

● James A. Hamilton is President-Elect of the College of Hospital Administrators and Superintendent of New Haven Hospital, New Haven, Connecticut

WE ARE in the midst of revolutionary changes in employer-employee relationships. They appear not only in every type of industry, but in every locality of the United States and Canada. Whether we like it or not, the temper of the times appears to indicate that a revaluation is in process, not only in the relationships between management and labor, but also in the ranks of labor. It is a revaluation of the fundamental responsibilities, techniques, and methods which should be permitted to exist.

For many years hospital management has felt protected against the normal strife of labor group relations present in other industries. No longer can we assume immunity from such group action. We, as hospital administrators, should not deceive ourselves that we are above the turmoil of such activity. We should not rest on the supposition that we may be an exception to the Wagner Act, or that we need not take an active part in such revaluation within our own industry.

Intelligent organization and scientific direction of personnel will become factors of increasing moment in determining the success or failure of the management of our hospitals. Our workers are alert to the trend and to the conditions developing in other industries. The public is more cognizant of our operations and expects better results from the management of our affairs. Where, heretofore, they may have tolerated relatively poor treatment of our employees, upon the basis of a humanitarian and charitable objective, such treatment in the future will be considered an indication of inefficient management. Specifically, the establishment and maintenance of satisfactory relations with employees is necessary to the effective utilization of the individuals of whom hospital organizations are composed.

Fundamentals of Personnel Relations

The problems of personnel relations have always existed in hospital organizations. Fundamentally, there is nothing new about them except their importance in light of the present-day trend of labor. There are some fundamentals, however, which I believe are worthy of analysis.

It has been my good fortune for many years to know, intimately, leaders and students of personnel relations in industry. The few truths which I am about to describe are not solely of my own experience. More particularly, they are derived from the experiences of leaders who have spent years in studying human relations and solving the ever-present practical problems.

Personnel problems arise because we are human beings. Therefore, the approach to nearly all labor problems must be made in the light of certain psychological factors which influence the habits of thought of those who are our employees. These factors constitute a background for an understanding of many attitudes of mind assumed by employees toward their environment, as well as for true interpretation of a majority of their actions. It will help to solve specific problems of personnel, if we first observe some of the more important influences and how they affect the worker's reaction to daily affairs.

In our community life social prestige varies in direct relationship to the social ranking of the position which an individual holds rather than to the salary received. Apparently there is no distinction between social status and job status. The place in which we live, the friends that we invite to dinner, the groups with which we are permitted to become identified, the families with whom we are willing to have members of our family associate, all seem to belong to the same rank, irrespective of income, in accordance with which the job ranks in the ladder of the specific community. Workers in separate fields associate with each other irrespective of the variety of income. The vice-president of a bank, the college professor, and the hospital superintendent may be socially equal though their incomes are radically different. The chief mechanical engineer of an industrial plant, a school, or a hospital may associate with each other socially although their salaries may not be the same.

Workers are more sensitive to changes in strata than to adjustments of salary. Apparently there is considerable spiritual satisfaction in a

Presented at the American Hospital Association Convention, Dallas, Texas, September 28, 1939.

job, and this satisfaction usually carries more weight than the financial compensations. Many of us would readily admit that the associated factors and satisfactions of our present jobs were more significant to us than the wage, even though we may wish for higher wages if we could get it. Somehow, we doubt if this is true of the personnel of lower rank in our organizations. Experience shows that an even more potent sensitivity is present within this group.

May I make my point clear with an illustration. A man, walking along the street of a large city, was stopped by an individual who attempted to beg a quarter for a meal. The refusal included a statement that the stroller did not give money to "bums." The beggar answered, "I am not a 'bum,' sir. Evidently you do not understand that there is considerable difference between individuals in my cimcumstances. You see, there are hobos, tramps, and bums. The 'hobos' are itinerant workers. They ride between jobs to new locations as the crops of various parts of the country are harvested. The 'tramp,' on the other hand, has a changing occupation and walks from one place to another. The 'bum,' however, neither rides nor walks and has no occupation whatever —in fact, does little or no work that is possible to avoid. I want you to understand that I am a 'hobo' and not a 'bum.' What could industry in this country do without the floating population of 'hobos' to take care of the apple crop, the lumber work, and the harvesting of wheat as the season reaches its peak in different sections of the country?"

In other words, each of us is exceedingly sensitive to the respect with which our ability is ranked within our individual occupation. Moreover, we are eagerly striving to keep that objective on a high rank in the ladder of affairs.

Labor disturbances are more often caused by minor issues than by major ones. Normally the disturbances are not a matter of class war, but are the accumulation of a number of minor irritations.

Recently, in one of the large industrial areas of the middle west, a strike lasted several weeks. The mediator finally received an answer from the leader of the strike, saying that it was all caused by the firing of the production superintendent. The workers had been used to present their grievances to this superintendent, who appeared to them to listen with sympathy and understanding. Now he was gone. Their fear was that there would be no one in the organization to whom they could go, who would listen to their problems with the same attitude. Once this individual was restored, the entire theoretical main issues were forgotten.

A few years ago a mediator, in a strike where the union officials had submitted some forty-two demands, discovered that thirty-eight of these demands were minor grievances scattered among various individuals. Once they were adjusted, the so-called four main and big issues were quickly overlooked and the men went back to work.

A strike in the lumber region of the northwest, which kept the workers out of employment for eleven weeks, centered around the fact that an overzealous production superintendent in a fit of economy, substituted perforated tin cans for damaged shower heads on the shower baths. This appeared to be the last straw and the strike resulted. Once the workers had this grievance corrected and were assured that such action would not be typical of the management's attitude, production was resumed.

Many more illustrations of this character could be enumerated, emphasizing that minor grievances are the focal point for many strikes. Moreover, strikes are more psychological than economic. It does not appear sound that workers go on strike for many months, losing the wages involved, for the sake of a few cents' increase in financial compensation. Perhaps the strikes offer the thrill and the illusion of power for the frustrated individual. He likes to feel that unless he, the fireman, is willing to perform his work, doctors and nurses, irrespective of their prestige and background, cannot perform their duties.

The philosophies of personnel relations may be typed by industries. One finds that the philosophies of the steel industries, in the handling of their employees, are quite different from those in the rubber industry or the textile industry. So borrow as we may from others, we determine our own policies. Surely, the management of no industry should be more sensitive to human emotions and relations than that of the hospital industry. Yet a review of the personnel policies followed by many organizations within our field does not show practices of which we could be proud or which should be held up as exemplary.

Approach to the Problem Within Your Hospital Organization

Naturally, the organization to be established for the handling of personnel relations within a particular hospital depends upon the size, the type of community in which it is located, the character of its clientele, and the form of the organization which controls the other activities of operation. However, regardless of the form of personnel

organization, in my mind the effectiveness depends directly upon the individual philosophy of the administrator. Consequently, I would urge that the first step in the approach should be taken by him.

Consciousness of the Personnel and Its Trends

Is there a definite consciousness of personnel problems in the minds of the administrator, the department executives, and the organization? It is a strange thing that we, administrators, spend hours developing a new stores control system, or a new method of centralizing supplies, or a technique of medical social service, or the instruction of nurses; yet we do not feel that the problem of personnel relations within our organization is worthy of very much study or analysis. Therefore, I would urge that we recognize that there exists an art and a science of handling personnel as human beings within an organization. There is plenty of printed material available to develop in us the background and the realization of what is involved in such relations and the techniques to properly handle them. True, we must expect that it will take time and money to handle these problems properly. However, I believe we will find that it is money well spent in terms of developing more satisfied and satisfactory personnel, and thus improving the quality of service to our patients.[1]

Labor Audit of Organization

Then I would suggest that we make a systematic and exhaustive analysis of the facts and affairs in our hospital which affect the relationship between not only the employees and the management, but the employees and their work. I mean by that, a job analysis, the development of job specifications, the job qualifications, the comparison of the salaries within and between classifications, the hours of employment, the perquisites of employment—their type and quality. Not only should we secure true facts on these matters from the executives, but from the employees as well. In other words, determine, if we can, the true existing conditions. Many administrators, who thus analyze their picture are surprised and sometimes shocked to discover conditions existing within their organization of which they were not cognizant. For example, I recall a hospital administrator who was much surprised to discover that unfairness to many of his faithful employees developed when, a few years ago, salaries had been cut, and subsequently, a policy of graded increases in the rate of pay of new employees had been established. He discovered that, by such a sequence of policies and poor wording, department heads were paying some of their new employees higher wages than they were paying employees who had been in their employ many years.

Recognition of the Difference in Strata

Selection. The recognition of the differences of strata or ranking evidences itself in the selection of employees. It appears to be the accepted fact that we cannot attract to the low ranking positions of hospital organizations people who have either ambition or ability. We are apt to resign ourselves, particularly in times of prosperity, to accept floaters of low grade, mentally assured that we could not secure any others. The same laxness of attempt is carried forward to the upper brackets in many hospitals. I refer to the employment of new technicians, dietitians, etc., without ever seeing them. It is no wonder that many employees are dissatisfied with the position they have accepted upon the basis of correspondence. And many administrators are dissatisfied with the workers they secured with no more measure than a written explanation of their abilities. Therefore, I would urge that we select employees only after we had secured, by a job analysis, the practical qualifications we require and after a careful review of the abilities presented in the terms of these requirements.

Training. Recognition of the strata appears in the introduction of the new employees to the job and in the training of the individuals for specific positions before we put them to work. It is shocking to realize how many hospitals subject patients to the hazards of a new inexperienced employee giving bedside care. Of necessity his skill must be perfected at the expense of the patients. We may disagree on methods of training, but not on the need of training where patients are involved.

Promotion Plans. Training not only for the immediate position but for the next position in rank should be developed through promotional plans whereby the employees of lower rank may get the opportunity for advancement in the future. Positions should be differentiated by the careful selection of titles for the individual jobs. Salaries should be commensurate with the titles. Our workers are highly sensitive to such policies. I recall inspecting a hospital recently with a successful administrator. In a ward pantry he indicated, in the presence of an employee, that she was one of the "ward maids." Her immediate reaction was one of correction. She was not a ward maid but a "kitchen maid." There seemed to be a great significance attached to the differ-

[1]See "A Reading List on Labor Relations and Personnel Management," American Hospital Association.

ence between her position and that in another classification.

Establishment of Policies and Methods of Handling Grievances

"Open Door" Policy. Administrators should establish channels for the adjustment of employee grievances that afford opportunity for freedom of expression and discussion. Such freedom can only be secured when the grievance can be discussed with some other person in authority, aside from the immediate superior. Whether this individual need be the superintendent or a personnel director matters little. It would depend upon many factors. What does matter is the presence of an "open door" through which self-considered abused employees may seek justice without embarrassment.

Contact and Sensitiveness to Human Traits. In order to appreciate the problems and difficulties of employees, administrators must meet their workers as individuals as well as employees. This need not affect one's dignity or discipline. Only through mutual understanding, personal contact, sensitiveness to human traits, and sympathetic appreciation of individual problems can grievances be settled in terms of human justice.

Recently, an administrator of a hospital with a large number of employees learned that his hospital was the focus of the activity of external influences which would be greatly disturbing to the international personnel relations. Appreciating that the basis of good current practice in personnel management was personal contact with the workers, he developed a procedure of contacting groups of employees each week. For example, the maids at one time, the porters, or the technicians at another, in such a way as to see each group about once in eight weeks. On these occasions he, of course, talked about something pertinent to their activities. Then he allowed, at each session, an opportunity for them to get off their minds questions about the management's activities or the working conditions. The workers began to understand by direct contact the type of individual with whom they were dealing and the attitude with which he was approaching their problems. Numerous rumors were dissipated by contact with these facts. Fears were alleviated before they had developed and became bugaboos. As a result of this activity, the external influences failed in their attempts to get enough workers together to effect any group organization. The workers were satisfied that they were receiving fair treatment.

Establishment and Dissemination of the Personnel Policies

If labor disturbances are to be prevented from seriously impairing the quality of care rendered to patients, the administrator should develop a carefully prepared statement of personnel policies and make sure they are explained fully to his employees. This acts as a safeguard against nonuniformity of treatment, forgetfulness of the administrator, or illusions of the worker.

Careful Analysis of the Philosophy of the Administrator

As I have previously stated, it is my opinion that the personnel policies, procedures, and temper of an organization directly reflect the spirit of the administrator. Shall the attitude be one of leadership or dictatorship? Is there a conception of team-work in which the authority is shared? Have we developed a willingness to have authority questioned? Have we sincerely desired and attempted to get the reaction and attitude of our subordinates before we made any change which affected their relationships?

Unfortunately, all of us are slaves to the traditions of our training. The accountant who becomes an administrator finds it difficult to refrain from running his organization at the end of a pencil. The nurse in whom has been instilled the fundamental pride and prestige of position, finds it difficult to control the professional ego. Who is the maid that she should question our decision when we are planning to move the dining room from one location to another? Although in fairness we may realize that this move may radically change the atmosphere and facilities of dining room conditions. Who is the orderly that he should question our plan to pay on the fourth of the month instead of the fifth or to begin vacations in April instead of July? It is difficult for many of us to refrain from being opinionated and at times arbitrary. We have all been positive about many things which we later found were not so—then realized that assertiveness is not a test of certainty.

Have we developed a sincere consideration of how decisions affect our fellow workers? Have we developed the sincere sympathy and patience necessary to explain our actions to subordinates? Have we learned many times with satisfaction, that they have raised in our minds factors which we did not realize and which we would not knowingly desire to abuse?

Conclusion

It is not sufficient that the organization shall consist from top to bottom of employees who are merely capable. The nature of their individual abilities must be studied and analyzed so that each employee may be given the kind of work he can

do best. Channels of advancement must be kept open. Promotions must be made upon the basis of demonstrated merit. Opportunities for training that will develop each individual to the limit of his capacity must be upon equal terms to all. Finally, the component parts of the organization must be welded together into a smoothly working, harmonious unit.

These results will not work themselves out automatically. They require the same serious attention and intelligent planning on the part of administrators that is given to any other type of hospital problem. Indeed they offer the most complex of all problems. Human nature will not "stay put," as will materials and things. It is subject to moods and caprices. Methods that are successful in one hospital cannot be transplanted without alteration in another, nor can situations be met tomorrow in exactly the same manner as that which proved satisfactory today.

It all means that fundamental principles are involved rather than techniques and that these personnel problems require unremitting attention on the part of administrators who understand human feelings and who are free from the handicap of closed minds or pet theories.

Practical Suggestions for Savings in Laundry Cost

The Massachusetts General Hospital, Boston, is conducting an excellent program in the education of its employees in the economical operation of its service departments.

Of particular interest is this series of questions and answers relative to the operation of the laundry and the use of linen, addressed to the employees of the hospital and particularly to the employees of the laundry.

A review of these questions and answers demonstrates many ways by which important savings can be secured for the hospital through the cooperation of its employees.

Do you know

That the *daily* output of finished laundry is 6 tons and the cost $240 a day?

That the *yearly* cost for linen replacement is .....$25,000?

That the laundry equipment is worth.$60,000?

That admissions, discharges and transfers cause 52 complete changes of bed linen *a day*?

That each major operation uses 29 pieces of linen and there were 6314 operations in 1938?

That 1000 lbs. of gauze are washed and reclaimed *each week*?

That *each week* the laundry handles:

1000	white uniforms, starched and ironed
700	women's uniforms, starched and pressed
1500	white coats and pants, starched and pressed
650	coats and pants, unstarched
250	khaki shirts and pants
4100	uniforms of all kinds

That each day 800 sheets, 450 spreads, 1600 face towels, 650 pillow slips, 425 bath towels, 300 blankets, 500 Johnnies, 250 pajamas, and 650 other pieces, or a total of 6245 lbs. of laundry are used on the wards?

That it takes only *one hour and fifteen minutes* to complete the laundry process?

Do you know that you can help on laundry by:

Not over ordering or hoarding linen.

Not using linen for cleaning cloths or dusters.

Not staining or destroying linen by careless use of iodine, mercurochrome, silver nitrate, dyes, acids or other chemicals.

Not sending bed pans, enamel ware, rubber rings, hot water bottles, rubber sheets, pillow cases, gloves, catheters, etc., to the laundry with linen.

Examining linen before sending to laundry as money, jewelry, false teeth, glasses and instruments are often found in soiled linen.

Not allowing safety pins, needles or broken glass to get into soiled linen as they are dangerous as a source of injury and infection to laundry workers' hands.

Removing patient's arm from sleeve of Johnny or pajama coat when starting an intravenous. Sleeves should not be cut except when absolutely necessary.

Returning soiled linen promptly, and using laundry bags. Sheets, pillow cases or spreads should never be used as substitutes for bags.

Using care in stripping beds so that spreads, sheets and blankets are not torn when they catch on the springs.

Using judgment in changing linens and considering the amount of time and money involved, and so not adding to the expense of laundry operation.

The Extension Service Program

The extension of hospital service, which has been instituted in New England with the assistance of the Bingham Associates Fund, has solved a difficult problem for the small community hospitals in certain sections of New England. This extension service, as applied in Maine with the Central Maine General Hospital, Lewiston, as the center, is described in this series of articles.

The application of this program could well be adapted in many instances to our larger cities and their surrounding hospitals, with one of the hospitals acting as a center of the extension program and covering hospitals in the respective sections of our cities. It is particularly useful to rural and small community hospitals in providing for these institutions high-class roentgenological, pathological, nursing, and other services at a cost which each hospital could easily afford to contribute.

This new program provides high type services for the patient, as well as the attending physician completely within the range of standard services for the scientific care of the patient which is the objective of all hospitals.

The Small Hospital in the Extension Service Program

HELEN GOODWIN, R.N.

IN THE PAST, the small hospitals, particularly those supported by communities and not close to any large hospitals, have been, and in many instances still are handicapped by the lack of adequate medical consultation. The scientific equipment may be of the best, but it is without value if there is no one available to interpret the findings.

The staff of the small hospital is made up of general practitioners who, although they may have the ability to read the x-rays grossly, lack the specialized training necessary for diagnosing the obscure findings, and so the opinion of the specialist is important. This is also true with regard to the work of the pathologist.

The individual small hospital cannot afford to engage resident specialists, that is, roentgenologists and pathologists. Even though resources were available without going to the larger hospital the specialist would become mediocre if he depended upon the experiences possible in the smaller hospital.

The extension service program has been most welcome and beneficial to our small hospital situated forty-five miles from Lewiston and about eighty from Portland. Formerly, the x-rays, pathological specimens and electrocardiagrams were sent to Boston Dispensary for diagnosis, the report of which was sent to us after a period of two days to three weeks. With the present set up, Dr. Ronald Clapp of the Central Maine General Hospital in Lewiston comes each week to do gastro-intestinal series and fluroscopies, to read x-rays taken between his visits, and to confer with any staff man desiring his opinion. Thus treatment, whether medical or surgical, is instituted at once. Pathological reports reach us now within a seven to ten day period. If a malignant condition is found, Dr. Julius Gottlieb, the pathologist of the Central Maine General Hospital, telephones his findings immediately upon diagnosis.

The Author

● **Helen Goodwin is Superintendent of the Rumford Hospital, Rumford, Maine.**

As you see, this benefits the patient therapeutically with early treatment of his condition, and financially with a shorted hospitalization. The hospital is aided by the shorter hospitalization in cases of state aid patients from whom we receive approximately one dollar a day, and state pauper cases for whom we are paid three dollars and fifty cents a day with nothing for extras. The work of the technicians is improved by meeting with the specialist, who gives constructive suggestions regarding changes in technique.

The work of our laboratory has increased to such an extent that we now have two technicians with half the salary of each paid by the Bingham Associates Fund. The consultation work for this department is also financed by this fund.

The prestige of the hospital is greater due to the caliber of the consultants and the high standard of the hospitals which they represent.

There has been a fine spirit of cooperation, and we feel proud that we are included in the extension service program.

Discussion of Dr. Samuel Proger's Paper on Hospital Extension Service*

SAMUEL STEWART

AS A LAYMAN without the intimate knowledge of diagnosis, medical care, treatment, and kindred subjects which are a part and parcel of a medical man's life, I feel that I am not qualified to discuss Dr. Proger's paper on Hospital Extension Service from all angles, but in as much as I have been somewhat associated with, and greatly interested in the establishing of extension service, in which the Central Maine General of Lewiston, Maine, has cooperated with Dr. Proger and the Bingham Associates Fund, which fund has made this service possible, I fully endorse what he has told you and also state that this plan which, to quote Dr. Proger, "is broadly designed to attempt to diffuse into small communities the medical advantages of a metropolitan center by direct and indirect contacts between these elements arranged on a permanent working basis," is not only feasible and practical, but that it is now beyond the experimental stage, and has demonstrated its value, and is in practical and useful operation. I feel this to be more than an achievement; it is a constructive, pioneering stage in hospital medical procedure and education, and has great possibilities for expansion.

Dr. Proger has given in detail a complete account of the set-up and scope of activities, the hospitals involved, and what has been accomplished up to the present time, and the possibilities that are in the making, and, all in all, a most constructive story of what, in the beginning, was an experiment but with a definite idea behind it all; namely, to promote better medical standards and procedures in the State of Maine to the benefit of the practitioner, the hospital, and the patient who is in need of both. With the interest and desire to be of service to the people of Maine, Dr. William Bingham, II, through agencies established and assisted by him, has made possible a worth while contribution to the health problem of the state of which he is a resident.

I am very enthusiastic about this type of assistance to the small hospital group in conjunction with the larger centralized hospital, and do believe that it is one of the most valuable contributions to furthering medical standards. To quote Dr. Proger again, "Our program is intended to make possible more and better medical work by physicians in smaller communities. It is not intended to stimulate these physicians to send more patients to metropolitan centers. Instead of urging that a patient on whom an electrocardiogram might be desired be sent from a small community to a larger center where such a tracing could be better interpreted, we urge instead that electrocardiograms be made in the smaller communities, but under conditions that compare favorably with those in the larger centers. It is our purpose, in the case of community hospitals as well as subsidiary centers, not to take over their activities but to make it possible for them to utilize more effectively what services they already offer and to make it possible for them to supply additional services under the most favorable circumstances." I am of the opinion that this type of educational service that has been inaugurated and established in the central Maine group, comprising the Central Maine General Hospital and its affiliates in Bath, Brunswick, Rockland, Augusta, Skowhegan and Rumford, has opened a field of usefulness that is bound to make itself felt in other like communities as time goes on.

*Published in *HOSPITALS*, January, 1939.

The Author

● **Samuel Stewart is President of the Central Maine General Hospital, Lewiston, Maine.**

A Cooperative Educational Process

This hospital extension service work may act to somewhat decentralize hospital services, and at the same time keep smaller hospitals in closer affiliation for consultation where the diagnosis is not clear or where treatment facilities are not available. The central hospital is encouraged to better its own diagnostic facilities, and the fact that it is a diagnostic center for the affiliated group is ever kept in mind, and patients are not sent to the large medical centers before exhausting the resources of the central hospital, for by this means the group is developed to the best advantage of all concerned; or, stated another way, physicians are discouraged from recommending patients to leave the state until those patients have been studied by the diagnostic group in the central hospital, for in the studying of diagnostic problems, medical education is promoted. It must be a unified educational process which, of course, must mean a cooperative one also. We must take a plain, common sense view of it all if the results

are to be accomplished. The aim is to arrive at the opinion of the group both as it pertains to diagnosis and to treatment.

The pattern as fashioned for this central Maine group can be used as a basis for other groups and can, I believe, be followed by a similar coordination of facilities if opportunity and inclination is present and financial assistance is available either through their own efforts, the assistance of individuals, or foundations.

You will note that I have not elaborated at all on the extension services established; namely, laboratory, pathology, x-ray and electrocardiography. I am very much interested in one other service in particular and that is nursing affiliation and education. This is of great importance, for it rounds out to a large degree the important phases of hospital procedures, and it must be as carefully fostered as is education in other branches. There is such an abundant field to work in when we consider the advantages of a well established nurses training school in the larger hospital, and the handicapped educational opportunities and facilities in the smaller hospital. Here is a great opportunity to lend a helping hand, and I am sure that a plan will be worked out wherein assistance in the matter of education and training will be mutually advantageous.

Responsibility of the Hospital Trustees

The hospital trustees have a great responsibility. They should interest themselves in matters pertaining to patient care and education, as well as matters pertaining to the financial and physical side, and with this allied interest and cooperation, much of value can be accomplished to the betterment of their own hospitals, having back in their minds a helpful attitude toward the smaller hospitals.

We must concern ourselves with the health problem as a whole, as it affects the hospital, the patient, the medical profession, and education. Medical centers should in some manner tender their facilities to the small hospitals which are not as fortunate and whose location and financial resources will not permit the establishment of diagnostic facilities which are badly needed. The small hospital is an integral part of the general health program and problem, and they must make sacrifices and give whole-hearted cooperation in order to obtain assistance and the advantages to be gained.

It is true that nearly all of the larger hospitals cannot afford, out of current income, to finance a complete hospital extension service, but they are in a position to act provided funds are available. The mere fact that the large hospital is a hub around which such services are established does not mean that all the small hospitals have to do is to accept something. They have to bear their part of the load and responsibility, and the governing boards and medical boards must be in accord if the plan is to operate successfully. The matter of post-graduate education by teaching clinics in the central hospital, and by scholarships and fellowships where best placed is most important, and this educational program should be carried along as a part of the process to get the desired results.

The direction and guidance of Dr. Proger, with the assistance of the Bingham Associates Fund, has brought to our little group, much that was needed. We are pleased with the progress and grateful for the opportunity to participate in the educational and helpful service.

In other communities there is a great educational opportunity to assist in increasing the usefulness of the facilities of the larger hospitals. The diagnostic facilities that are available and the educational opportunities afforded to the benefit of both the large and small hospital, with resultant benefit to the sick, who after all are the ones about whom we are concerned and to whom we wish to give the best kind of medical care. I am convinced that the hospital extension service is one of the means to this end.

Extension Service in Pathology

JULIUS GOTTLIEB, M.D.

THE extension work in pathology and general laboratory procedures represent specific divisions of the Hospital Extension Plan.

This phase of the Bingham Associates interests may be considered as the third step in a general plan for the advancement of rural medicine in Maine; the other two being fellowship grants to practicing physicians in Maine for postgraduate

The Author

● Dr. Julius Gottlieb is the Pathologist at the Central Maine General Hospital, Lewiston, Maine.

study, and the developing of diagnostic facilities at the New England Medical Center. Each of these three phases, although representing an integral unit in itself is closely interwoven and correlated with the other activities and not designed to be dissociated from one another, either in theory or in practice. Each phase is designated to stimulate and complement the other—both from a service and educational point of view. Thus, graduate courses for a practicing physician in medicine stimulate interest in laboratory procedures in which division opportunities for study and advancement are equally afforded. Although opportunities for assistance in medical diagnoses are generously offered the basic concept is that of furthering medical education. The plan does not aim to facilitate medical diagnosis by removing problems from any community but to make available better opportunities for the study and solution of these problems.

Handicaps in the Practical Application of Medical Research

Medical progress in the last decade has been remarkably swift. The scientific methods for diagnosis made possible have out-stripped the economic abilities of many individuals and groups of individuals to avail themselves of the knowledge accumulated by brilliant and laborious research in the various fields of medicine and particularly of its more intricate laboratory aspects. Elaborate and expensive laboratory equipment and skilled personnel have become essential in the practice of scientific medicine. The stage of rapid development and accumulation of medical knowledge has been aptly described as progress in the vertical direction—analogous to the stage of production in the world of economics. The distribution and application of this knowledge, or the so-called horizontal phase has met with difficulties quite identical with those in the field of economics with which medical problems are inextricably associated.

It is of little comfort to an individual or group of individuals to be cognizant of the fact that the site of pneumonia can be located more definitely by x-rays and differentiated bacteriologically into numerous types as an aid to therapy, if such facilities are not made available to them; nor that the nature of tumors can now be better determined both from the point of view of prognosis and of therapy when such knowledge cannot be applied to the particular instance of interest and concern. These difficulties offer a greater problem in the smaller communities than in the larger because of more limited opportunities of pooling physical and financial resources and the engagement of skilled personnel.

In any field of endeavor progressively furthered by intelligent research, knowledge will out-strip its dissemination and application. A certain differential must always exist. Nevertheless in medicine particularly, this differential must be reduced to a minimum. This differential, great or small, will be present in any form of medicine and may serve as the point of attack on any existing system as its most vulnerable aspect. The greater the gap between the development of scientific medicine and its application, the greater is the danger of attack by designing adversaries. This holds true at present despite the obvious truth that the present system of medicine is responsible for the remarkable progress and high standards of today.

Recognizing the more pronounced economic burdens imposed upon smaller communities attempting to provide essential pathological, roentgenological and cardiological services the Hospital Extension Services plan was evolved which in general may be interpreted as group hospital practice in each of the various fields.

The plan constitutes the creation of a center with which are associated neighboring smaller hospitals. In our district the Central Maine General Hospital Laboratory serves as a center and associated with it are the Rumford Community Hospital, Brunswick Hospital, Bath Memorial Hospital, Knox County General Hospital, Augusta General Hospital and the Redington Memorial Hospital. These hospitals vary in distances about its center from twenty to eighty miles and in general are peripherally situated, although three of the hospitals fall in a direct route to the most distant and two others similarly distributed.

Prior to the Hospital Extension Plan laboratories had already been established in several of these institutions. In others the establishment of laboratories was encouraged by the Bingham Associates and assisted in their establishment by the pathologist of the Central Maine General Hospital. Where needed, technicians were employed by the various associated hospitals and remuneration met in part or in whole by the Bingham Associates. The first step in initiating the program was taken in 1937. As a result of these grants it was possible for several of the associated institutions either to create or to extend laboratory facilities to their physicians.

Technicians are Given Opportunities for Advanced Study

Technicians at these institutions are privileged and encouraged to participate in conferences on laboratory methods conducted at the Central Maine General Hospital. Each technician is

granted an annual month's scholarship at any of the hospital laboratories in Boston, or elsewhere that they may choose, and, in addition, to spend one month at the laboratory of the Central Maine General Hospital. Scholarships are awarded to the various technicians during their study in advanced courses outside the state and salaries are continued while working under the direction of the central laboratory. Special effort has been made at the New England Medical Center laboratories to meet the needs of the various technicians. During their absence from their home hospital a technician is substituted at these institutions designated as "Itinerant Technician," thus affording a continuity of laboratory services at the institution. There is thus afforded an opportunity to each of the technicians to perfect himself in any of the branches of medical technology which may be indicated and to bring back to these institutions new methods applicable as aids in clinical diagnosis. By frequent conferences the laboratory procedures developed during the interim of their advanced studies are brought to the attention of the various technicians by those more recently pursuing such courses. Incidentally and yet of equal value is the information to the pathologist, house officers, and other physicians attending. It thus becomes possible for any of the associated hospitals under the plan to have performed any and all of the technical procedures which may be desired.

Submitting Material to Central Laboratory for Consultation and Study

In addition each hospital may submit material to the central laboratory for further studies and consultation and in turn the Central Maine General Hospital is privileged to submit the more difficult and intricate material for further studies and opinions to the laboratories of the Joseph H. Pratt Diagnostic Hospital. This plan now in operation for the second year has definitely proven its value both from an educational and service point of view.

Opportunities for submitting tissues to the Central Maine General Hospital laboratory were formally offered to the various associated hospitals in July 1938, thus extending the services already in practice. Surgical tissues and post-mortem material are routinely submitted to the Central Maine General Hospital laboratory for preparation and diagnosis. Tissues so submitted may be reported to the interested physicians as promptly as those prepared for physicians at the Central Maine General Hospital laboratory. The period of fixation and shipment practically coincides with, therefore, no loss of time.

A well trained tissue-technician is provided for the preparation of microscopic sections. The need for excellent tissue preparation is immediately obvious from a diagnostic point of view and is of equal value to the Central Hospital as to the associated hospitals. It has become apparent that tissue preparation requires a skill not ordinarily possessed by the general laboratory technician employed previous to the inauguration of the present plan. All tissues are examined and described grossly and microscopically and diagnosed by the pathologist of the Central Maine General Hospital and reports mailed, or phoned where indicated, to the various associated hospitals. All slides are serially filed and reviewed with the interested physician upon request. The central pathologist may be called for frozen sections and post-mortem examinations at these institutions. Although this plan is only in operation for less than a year, post-mortem examinations have been performed in several of the institutions where none had previously been done. In each instance the obtaining of post-mortem examinations can be directly attributed to a physician in a locality interested in the development of the laboratory. The pathologist is also available for consultations and discussions of the laboratory aspects of medicine at the various staff meetings.

Opportunities for Intensive Study Made Possible for Local Physicians

At several of the institutions a local physician has become particularly interested in laboratory medicine and it is hoped that in the course of time some physician in each locality will assume to a greater extent an interest and obligation in the conduct of his particular hospital laboratory and serve as clinical pathologist or laboratory director, and that opportunity will be afforded such individuals for more intensive study in laboratory medicine. In several institutions this phase of development is already in progress.

Tissues of unusual interest presenting problems to the pathologist of the Central Maine General Hospital are further studied at conferences or submitted to the professor of pathology of Tufts Medical School for opinion. The professor of pathology at the Tufts Medical School is at all times available as a consultant on any problem arising in pathology. Conferences are held at Tufts medical school weekly to which all Maine pathologists are invited. These conferences are of important educational value to each of the participants wherein problems of unusual interest or difficulty are demonstrated or discussed. Here again it becomes obvious that tissue problems of patients in sections covered by the Hospital Extension Plan regardless of financial status may

receive an opinion equal to that afforded by a large teaching institution.

The Plan as outlined is a result of a cooperative understanding between the Bingham Associates, the Central Maine General Hospital and the various associated institutions and is entered into voluntarily by the various agencies. Each party is at all times free to accept or reject any portion of the plan. Its success is entirely dependent upon the recognition of the various needs to patients in whatever locality they may be and an earnest endeavor to be of mutual assistance. It must be recognized by the various institutions that the elevation of medical standards and the more efficient services in another locality is of equal importance in a larger sense to those of its immediate vicinity, thus presupposing a newer and broader approach to the treatment of the ill than that which has been customarily envisioned.

Central Schools of Nursing

IRENE ZWISLER, A.B., R.N.

NURSING education in this country may be divided roughly into three periods; the period of pioneering which lasted through the twentieth century, the period of 15 years' rapid expansion, and the period of stock-taking in which the Grading Committee played a conspicuous part.

Continuing this we observe that the hospital of today, in contra-distinction to those of yesterday, are no longer graduating "by-products." In their place we now have young women who are capable of fulfilling any type of nursing duty in the community.

In order that these nurses may receive the training sufficient for this purpose, it is necessary for either the large or the small hospital to include in its school of nursing the following:

1 Laboratories fully equipped to teach basic sciences
2 Qualified instructors
3 Clinical material for ward teaching
4 Nursing experiences in fields such as tuberculosis, public health nursing, and mental diseases

Nursing Education in Rural Hospitals

As you know, the Central Maine General Hospital affords centralized medical service in x-ray, laboratory techniques, pathology, and electrocardiography to hospitals within a radius of 50 miles. This plan is a success. This arrangement led us to consider nursing service in hospitals in the United States which have adopted the plan of centralized nursing service.

Fifteen years ago certain schools of nursing in the United States commenced a cooperative adventure in teaching nurses in central schools. A central school of nursing may be defined as one in which several schools of nursing combine their facilities in the teaching of students, either undergraduate or graduate.

The Author

● **Irene Zwisler is Superintendent of the School of Nursing, Central Maine General Hospital, Lewiston, Maine.**

A survey was made by this school which included such schools as:

Westchester County
Milwaukee Central School of Nursing
Utica Central School of Nursing
Central School of Nursing in Washington
Seton School of Nursing in Colorado
Mercy College of Nursing in Detroit
St. Mary's College of Nursing in Grand Rapids
University of Washington, School of Nursing Education

Undergraduate Training in Central Schools of Nursing

No two schools seem to be patterned alike as each community presents a different problem as to size and location of hospitals, kind of service rendered patients, laboratory facilities available, preparation and training, tuition and the budget. Roughly they fall into three groups:

Plan I

The first plan is to teach all pre-clinical basic sciences, with or without the course in principles and practice of nursing, at the central school. This may be a college or university, a building purchased for that purpose, the high school, or in the hospital teaching departments. It may be for a single term or two. The small hospital presents the candidate, she enjoys the same privileges as other students in the central school, and

the small school assumes responsibility for her training after this preliminary period. This is perhaps the simplest plan. Simmons College has an arrangement with the Deaconess and Children's Hospitals whereby the students from these institutions are received by the college for instruction in the scientific subjects necessary for their work.

The Utica Central School of Nursing in New York furnishes all the first year of instruction and practice. The preliminary period is six months and includes the basic sciences. The second term is four months long in which is taught history of nursing, sociology, psychology, materia medica, dietotherapy, and seventy-five hours of medical and surgical nursing. These students are close enough to the central school so that it is possible to live in the school which sent them. Their practice in their own hospital consists of one hour daily except Saturdays and Sundays on which day each student works one-half day. This practice is under the supervision of a teacher who understands the work done at the Central School.

The Westchester Central School of Nursing was formerly composed of five schools. They had the students for one year. The responsibility of education rested with the directors and the principals of the schools; the expense was divided equally except that Bloomingdale furnished the building and its facilities. The students were admitted twice a year and attended the central school each afternoon and one morning. These schools were near enough so that with one exception the students did not eat at the Central school. All students met the same qualifications and mental testing was employed here. The subjects were essentially the same as those now taught in Utica.

Plan II

The second plan is essentially the same as the first, except that the schools continue to cooperate for the entire three year period. Training in special departments such as obstetrics is supplemented by one of the schools, if sufficient clinical material is lacking in the other. Training after the preliminary period is treated as an affiliation.

The Seton School of Nursing in Colorado is an independent nursing education organization, using the coordinated clinical facilities of three hospitals and controlled by a special board of directors. This board is composed of the deans of two colleges, the directors of the schools, the superintendents and the superintendents of nursing of the hospitals to which the students are assigned for clinical experience. The students receive their clinical experience according to the prescribed course. These hospitals are located some distance apart with Pueblo forty-five miles away from the center in one direction and Trinidad ninety miles in the other direction, composing a radius of approximately 150 miles. Clinically they represent a widely diversified group of patients with an average of approximately 275 beds. These nurses have opportunities in surgery, medicine, obstetrics, pediatrics, emergency and first aid in a mining district, and three months' experience in tuberculosis.

Plan III

The last plan is the most ambitious because the school of nursing becomes centralized in the strictest sense of the word. The central schools control and train all the students who enter. Some of the three year period is spent as an affiliation in other hospitals or clinics under the supervision of a nurse directed by the central school. The central school alone offers a diploma and is responsible for the student during her entire training. I refer you to the University of Minnesota and the work of Dr. Beard.

Usually these schools are controlled by an educational committee made up of the superintendent and the director of the school of nursing from each hospital. Added to this group are those nurses who are concerned with the education of the student. Matters of policy are settled by this board but problems of education rest with the educational director who is usually stationed at the central school. The cost of the preliminary period to each student is about the same as for most schools of nursing. It usually includes uniforms, laboratory fees, textbooks, stenographer's supplies, and in some cases transportation. Each school shares the expense according to the number of students who participate and the cost of the tuition is uniform for each affiliated hospital. Some hospitals simply divide expenses which include salaries of instructors and school supplies. In Milwaukee the Board of Education of the Vocational School has shared some of the expense with the hospital. In Washington the League of Nursing Education established an educational fund to help defray expenses.

Advantages

From the survey which we made for this paper it would seem that the following advantages are common throughout the country wherever this has been tried:

1 There is a material reduction in the cost of the preliminary period which is the most expensive part of a nurse's training. It is less expensive to budget the central school

than to support individual schools of the same caliber.

2 The plan would attract well prepared instructors who may or may not live outside the institution.

3 A higher standard of education in the basic sciences can be maintained. Education which is apart from hospital administration tends to be on a higher level and responsibility of teaching is shifted to a well qualified person. This enables the principal of the school to focus her attention on problems concerning the care of the sick.

4 Social contacts are beneficial and the competition would keep the spirit of inquiry alive. The student is accepted who receives the best rating and does good work on the ward.

5 It is possible to pool all interests and facilities such as laboratory and library.

6 The central school is expected to raise its standards of nursing to meet these greater responsibilities. The school must serve the needs which the community recognizes as its own, unless that school wishes to be supplanted.

The Central School as it Affects The Graduate Nurse

That the graduate nurse needs special preparation for her job is a recognized fact. That too many nurses have found no employment is also recognized. It is impractical to add more than the basic curriculum in the three-year program for the student nurse. If a school accepts the challenge of leadership in the community it must accept the responsibility of careful preparation of its personnel and recognize the advisability of further study and investigation.

Last fall the Central Maine General Hospital recognized this need and instituted a staff education program for its graduate nurses. As nursing in the community is a reflection of all nurses practicing in that area, we invited all registered nurses to participate. It was decided that in order to make this plan successful, these facts must be kept in mind:

1 The aim and objective of the program was to better the nursing care of the sick by a concerted effort on our part.

2 A cooperative venture of this kind should strive to produce efficiency in nursing time and effort and reduce waste of hospital supplies and material.

3 Opportunities for individual expression were to be encouraged, particularly among the head nurses.

4 Graduates were to be given the opportunity to establish social contacts with nurses from other schools.

5 Hospital time was to be planned for these programs so that each graduate might attend while on duty.

6 Effort was to be made to have the topics cover as many subjects as possible in order to stimulate the widest interest.

7 These programs should help to impress the student that her period of learning extends beyond graduation.

The physicians in charge of each department of the hospital were consulted. Weaknesses in the nursing care corrected. The physician then elected someone to represent his viewpoint. A graduate nurse was chosen to assist and other members of special departments helped. Talent for these programs was obtained from our own hospital staff.

The attendance has more than met our expectations for it ranges from fifty to ninety nurses, some of whom have come from a radius of fifty miles over ice roads in uncertain weather. The material presented on the program is mimeographed each time and is available for those who found it impossible to attend. Often the physician finds use for this latter in his teaching program and the graduate nurse refers to it in her ward clinics. There is no doubt that its worth is found in a closer cooperation among departments and as time goes on its stimulating effect seems to be more far-reaching than we had anticipated.

Professional Meetings and Institutes

Another method of preparing the graduate for her job is by attendance at professional meetings and institutes, such as are sponsored by the League of Nursing Education in many states. Here in Maine, plans are under way for a League Institute this year which will include demonstrations of nursing procedures, lectures, ward rounds and clinics covering a period of three to five days.

Schools entering on an education enterprise such as this must provide good supervision. A well-trained physician who has given several years of his life to prepare himself for a special field of medicine or surgery has the right to expect skilled nursing assistance. If scholarship were available, it would seem possible that this objective might be accomplished in a much shorter time. Aside from activities within the hospital, five scholarships were awarded at our hospital

this year to stimulate interest in post-graduate fields. Others left voluntarily for added experience. These studies include psychiatry, obstetrics, methods of teaching, pediatrics, public health nursing and surgery.

Schools of nursing have turned out graduates successfully ever since the nursing profession was established. In this paper I have tried to show that it might be possible to produce better nurses if several hospitals worked together each institution contributing some phase of the nursing program in which it excels. In order to carry out this plan successfully, each hospital is expected to provide adequate supervision throughout the period of training. Just as improved facilities in x-ray and pathology have advanced rural medicine to its present state of development in Maine, so one could be hopeful that a cooperative nursing service might be equally beneficial to rural nursing.

We are indebted to the following persons whose experience and knowledge were so graciously put at our disposal in making this survey: Ella M. Rafuse, Elsa M. Goldberg, Jean A. Lauder, Elizabeth S. Soule, Stella M. Hawkins, Sister Cyril, and Helen Wood.

Bibliography

NURSING EDUCATION

The next great step in Nursing Education, Arthur C. Bachmeyer, M.D., *HOSPITALS*, April, 1936, page 53

Nursing education and the Hospital, Arthur C. Bachmeyer, *Colorado Medicine*, August, 1936

Marching forward in Nursing Education, Mary M. Roberts, *HOSPITALS*, May, 1936, page 9

Post Graduate work in Psychiatric Nursing, Adolph Meyer, M.D., *American Journal of Nursing*, February, 1937, page 18

Nursing Schools and Hospitals, N. W. Faxon, M.D., *HOSPITALS*, February, 1936, page 24

CENTRAL SCHOOLS OF NURSING

Cooperation and Progress, E. M. Rafuse, *American Journal of Nursing*, April, 1933, page 349

An experiment with small and scattered schools, Louise Parsons, *American Journal of Nursing*, May, 1925, page 384

The Milwaukee Central School of Nursing, Ethel Odegard, *American Journal of Nursing*, May, 1925, page 386

In Washington, D. C., Elizabeth Melby, *American Journal of Nursing*, May, 1925, page 388

Building the University School, Edith S. Soule, *American Journal of Nursing*, May, 1938

HOSPITAL EXTENSION SERVICES

Hospital Extension Services, Samuel Proger, M.D., *HOSPITALS*, January, 1939

Contribution to Medical Research, The Bingham Associates Fund, The New England Medical Center and Rural Medicine, Samuel Proger, M.D., pages 967-983

STAFF EDUCATION

Staff Education and Development, Edna S. Newman, *Hospital Management*, October, 1938, page 33

Social Changes and Professional Education, *American Journal of Nursing*, November, 1938, page 1251

What changes in administration and Graduation Standards, League of Nursing Report, 1934, page 118

Post Graduate Education Old and New, Isabel M. Stewart, *American Journal of Nursing*, April, 1933, page 361

Professional Growth and Staff Education, Irene Robertson, *American Journal of Nursing*, October, 1936, page 1023

Educational advancement for Graduate Nurses, Edna S. Newman, *American Journal of Nursing*, May, 1934, page 435

Graduate Staff Nursing, Gabrielle T. Mulvane, *American Journal of Nursing*, October, 1937, page 1084

What can the public expect from nursing? League Report, 1934, page 72

What can the public do to insure Good Nursing Service? League Report, 1934, page 76

Reaction of a General Practitioner to Hospital Extension Service

FRANCIS A. WINCHENBACH, M.D.

IT IS my purpose to present the reaction of the general practitioner to the new work in extension service and to show wherein the patient, hospital, and the general practitioner all derive a great benefit.

It will be better perhaps to take a specific example and to present a picture of a small community and its available equipment for scientific medicine before the advent of extension work and to compare it with the fine results to date after the extension service had been instituted.

Here we have a small 60-bed hospital serving a community of 10,000 and available to an additional 10,000 in the country towns and villages close by. The staff consists of twelve general practitioners with one specialist in eye, ear, nose and throat. All these men realized the value of laboratory, roentgenology, electrocardiographic and basal metabolism work but it was impossible to have anyone trained along any of those lines because of the expense involved. Accordingly the individual physician had to be responsible for any work desired except for the x-ray service. Although it was not possible to have a full time

The Author

● **Dr. Francis A. Winchenbach is a General Practitioner in Bath, Maine.**

roentgenologist, or even a part time man, we did have a man with some training to take plates and offer an interpretation. You can readily imagine that the highly technical and time consuming laboratory tests were few and far between. There was no electrocardiograph available.

Post-mortem examinations were very rare for several reasons, primarily I suppose because the attending physicians had to perform them themselves.

Outline of Work Accomplished

Now all these failings have been remedied by the wonderful work the Brigham Foundation is carrying on in promoting more scientific and more progressive medicine in the smaller communities. The following outline of the work accomplished so far, will give some idea of its possibilities:

A laboratory was built and equipped and it is one of the finest in the State of Maine. A very competent trained technician has been employed and a pathology service instituted.

An electrocardiograph was purchased and one of the men took a course on interpretation.

A basal metabolator was acquired.

Once a week a well trained roentgenologist is at the hospital to read the week's plates and to offer suggestions for improvement in technique and to check on the interpretation that has been made.

The results have been astounding and must surely be a source of great satisfaction to those responsible for this work.

The immediate value is of course to the patient, as it should be. Forty to fifty mile trips are no longer necessary for these services. Delays waiting for the mail service to deliver specimens and return reports are no longer necessary and the expense involved is decreased definitely.

The physician must of necessity keep abreast of the developments in medicine and become interested in scientific advances. He becomes a better diagnostician and a more valuable man to his community.

The hospital is greatly improved because of its newly acquired facilities and it commands a greater respect in the community.

For the last analysis the tremendous mutual gain in confidence between the patient, physician, and hospital, and the elevation of the morale of all three do make this extension service priceless to a small community.

Hospital Industries Association

The seventeen-year-old Hospital Exhibitors' Association, which has given much valuable assistance to the several Hospital Associations in matters related to convention exhibits, has changed its name to the Hospital Industries Association.

President Floyd L. Marvin emphasizes that the change in name signifies the broader scope the Association's activities have assumed in recent years. While the Hospital Industries Association will continue its constructive work in connection with convention exhibits, it will also carry on and promote the following major activities:

1 A continuous program of education and publicity to create a still better understanding between hospitals, their associations, and member firms of H. I. A.

2 Protection of the interests of both hospitals and accredited dealers through the workings of an Advisory Committee composed of two representatives each from the American Hospital Association, the Catholic Hospital Association and the Hospital Industries Association.

3 Cooperation with hospitals and their associations for continued improvement of services, supplies, and equipment for the better care of the patient.

4 Assistance in establishing Fair Trade Practices, a Code of Ethics, and other statements of business policy that hospitals and suppliers may observe for their mutual benefit.

5 Assistance in advancing Hospital Association objectives to their members, their business contacts and the public.

The expanded influence of the Hospital Industries Association along these varied avenues should become an increasingly useful force in hospital-industrial relations.

Principles of Hospital Planning With Special Reference to the Small Hospital*

WILLIAM H. WALSH, M.D., F.A.C.P.

FOR the purpose of this discussion we may assume that a small hospital is an institution which, while housing only a limited number of beds, affords those minimum facilities considered essential for the diagnosis and care of the sick and injured, however limited may be the space, equipment, and personnel provided.

With a full realization of the fact that each hospital must be designed to meet particular needs, no attempt will be made here to offer detailed information on planning, but rather to indicate a few of the fundamental essentials deserving consideration in a hospital project.

Laboratory

It will be conceded that there must always be a laboratory and the space allotted will bear a direct ratio to the bed capacity of the institution; the minimum requirement for the very small hospital would be one room not less than 12'x14' with equipment for microscopy, urinalysis, hematology, serology, and some chemistry. Needless to say, however small the laboratory, one certified technician will be required and there should be professional supervision.

Mortuary

Quite regardless of the size of the hospital, there should always be provided a necropsy room and, in the case of the small hospital, a room not less than 12'x16' as close as possible to an elevator and provided with a suitable exit. While it is difficult to secure necropsies in many small hospitals, encouragement will be afforded if this room is well ventilated and lighted and every facility is furnished for the work to be performed. The minimum equipment would be a substantial necropsy table, with hot and cold running water and a drain, a clinic sink, a lavatory, a work table with scales, an instrument closet and an instrument sterilizer. Walls should be tiled to a height of about five feet six inches and quarry tile makes an excellent floor in which a drain should be provided.

The Author

● Dr. William H. Walsh of Chicago is an internationally known Consulting Specialist on Hospitals.

Roentgenology

The need for equipment capable of use for roentgenograms and fluoroscopy is so well recognized that a hospital without it is hardly worthy of the name. Here again the size of the department depends upon the bed capacity, the minimum space required corresponding closely to that indicated for the laboratory, with the addition of a dark room of not less than 5'x6'. A certified technician should also be on duty here and in the very small hospital it may be necessary to secure one person who is qualified both as a laboratory and x-ray technician. This room should be adequately ventilated, have a resilient floor and windows that can be completely darkened.

Casualty Department

Once a hospital opens its doors it must be prepared to give at least first aid treatment to emergency accident cases and we therefore consider it essential to provide, in space accessible to an ambulance, provisions for receiving such patients, which of course, in the small hospital, will consist merely of a room about 10x12 feet with an emergency table, running water, fracture material, an instrument and dressing case and an instrument sterilizer. As the hospital grows, this department expands until it sometimes embraces an emergency operating room, utility room, several treatment rooms and a casualty ward. If possible, there should always be available here a resuscitating device and an oxygen tank. The floors should be of terrazzo, and adequate special lighting is desirable.

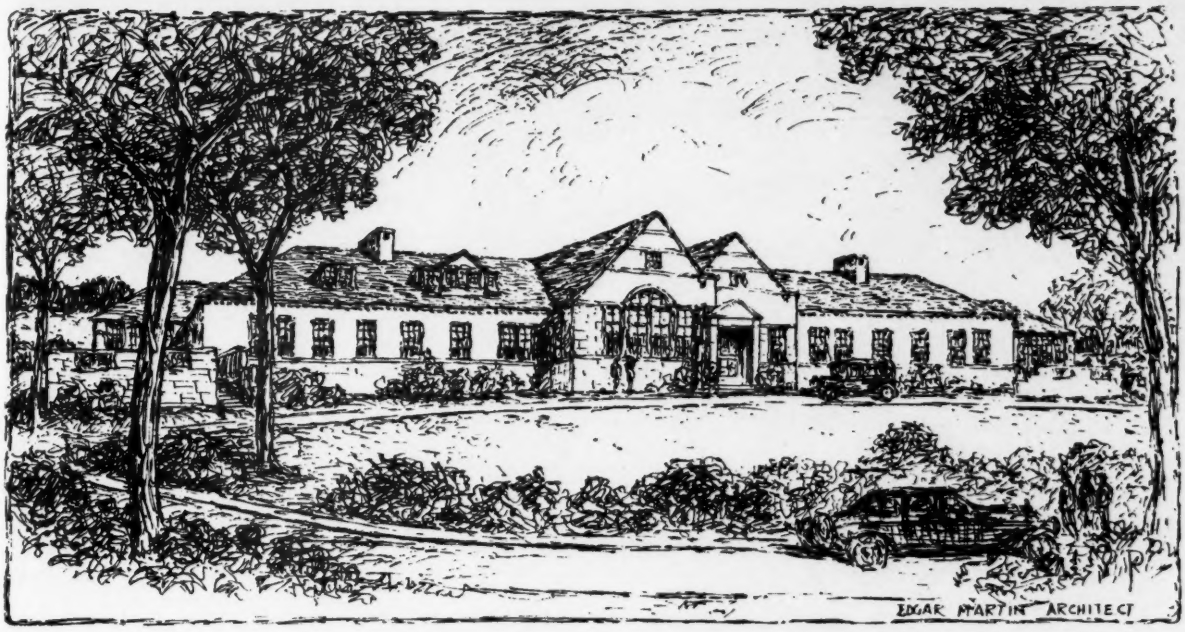
Medical Records

One of the basic requirements for the approval of a hospital for intern training as well as for registration by the Council on Medical Education and Hospitals, is that there shall be maintained complete medical records, and we are committed to the belief that a contributing factor to poor medical records is often the failure of the hospital

---

* The first part of this article appeared in the March issue. Page 73.

Presented at the Annual Congress on Medical Education and Licensure, American Medical Association, Chicago, Illinois, February 13, 1939.



Architect's Sketch of a Small Hospital

to provide adequate and suitable facilities for the keeping of medical records. To meet this situation in the very small hospital we design a room not less than 14x16 feet for a combined medical library and record room, located on the main floor readily accessible to the doctors' coat room. Built-in book shelves, a spacious writing and reading table, file cases and stenographer's desk are the essential requirements. The lighting should be indirect but adequate, and the floors of a resilient material. This room may also be used for staff conferences after regular hours.

Doctors' Reception Room

Although it would seem that no hospital could be too small to provide a suitable reception room for the staff, too often we find little more than an alley-way with coat hooks on the wall. An accessible room with toilet and lavatory, comfortable chairs and facilities for hanging coats would seem to be the minimum requirements.

Operating Suite

The very small hospital will be fortunate to have one good operating room with the necessary utility and scrub-up facilities. It should be so located as to avoid through traffic. Properly designed, with scrub-up and sterilizing facilities outside the operating room, a space of not less than 14x16 feet is satisfactory. Dependence should be placed upon good artificial lighting, rather than upon daylight, and if air conditioning is feasible, it is always desirable. A special light is required for the operating field and ceiling fixtures for general illumination. Floors should be of terrazzo, blocked with brass strips for insulation, and, of course, bases should be coved. Tiled walls are preferable; gypsum plaster can be used —but in either case, glare should be reduced to a minimum by the use of a dull grey-green or sky-blue wainscoting.

Adjoining the operating room there should be facilities for the surgeons' and nurses' washup, sterilizers for instruments and utensils, utilities and workroom for the nurses, a doctors' dressing room and either a room or suitable cabinet for instruments. As the hospital grows, of course, here, as in the case of all other departments, the facilities expand and additional units become necessary. Air conditioning is always desirable for the purification of the air, and the elimination of static electricity by raising the percentage of relative humidity.

Obstetrical Suite

We are inclined to advise that unless the small hospital can arrange its delivery facilities in such manner as to avoid dangerous hazards, it would be far better to eliminate this activity until minimum requirements can be met. However humble may be the home of the parturient woman, we believe she is safer there under competent medical supervision than in a hospital where the physical conditions are such as to endanger the lives of both mother and child.

THE HOSPITAL LOBBY · FROM THE INFORMATION DESK

We believe it essential that the delivery room should be completely separated from the operating room, preferably on another floor, and when possible it should have separate nursing service. A room 12x14 feet is adequate, and even a slightly smaller room will answer the purpose providing scrub-up, sterilizers and clinic sink are located outside. In the small hospital it will probably be necessary to sterilize all dressings and utensils in the surgical sterilizing room, in which case the obstetrical work should be done separately. A separate instrument sterilizer should always be provided in the obstetrical suite. The floors, walls and lighting facilities should be treated as in the operating room. A utility room, nurses' workroom and doctors' dressing room are all necessary for this suite. When possible an additional delivery room and a few labor rooms should be included in the obstetrical suite.

The nursery, while usually included in the obstetrical suite should be so located as to permit visitors to look through glass panels without entering the obstetrical area, and the closer the nursery is to the nursing mothers, the better. The nursery should be designed in such manner as to provide a vestibule entrance for doctors and nurses in which there should be a lavatory and hooks for gowns. No one but those engaged in the care of infants should ever be permitted to enter. The floor should be preferably of a resilient material with terrazzo coved base and border, the ceilings should be acoustically treated, and the walls free from glare. Indirect lighting only should be used here. Contrary to past custom, we now endeavor to place physical barriers between infants and to use individual basinets equipped with a shelf for utensils, linen and supplies with a collapsible or sliding table leaf for dressing and cleaning the infant. Air conditioning, of course, is always desirable with a constant temperature of not less than 78 degrees and relative humidity of not less than 55 per cent. For premature infants both temperature and relative humidity should be increased.

Isolation Facilities

However careful a hospital may be in attempting to exclude communicable diseases, there is always the danger of such diseases arising coincidently, so that it is highly desirable that there be available in any hospital a few rooms so located that efficient communicable disease technique can be quickly established. Then too, there are certain types of communicable cases that cannot be refused by any hospital worthy of the name, and if suitable accommodations and competent nurses are available, there need be no risk of cross infection. We therefore endeavor to provide even in the smallest hospital a few rooms designed for this purpose but usable for any other type of case when not required for communicable diseases. The main requirements for these rooms are that they shall be located off the main traffic lanes, preferably at the end of a corridor, that they shall have separate sub-utilities and that each room have a lavatory close to the entrance. If such a suite of rooms can be placed within a sub-corridor, greater isolation will be thereby achieved.

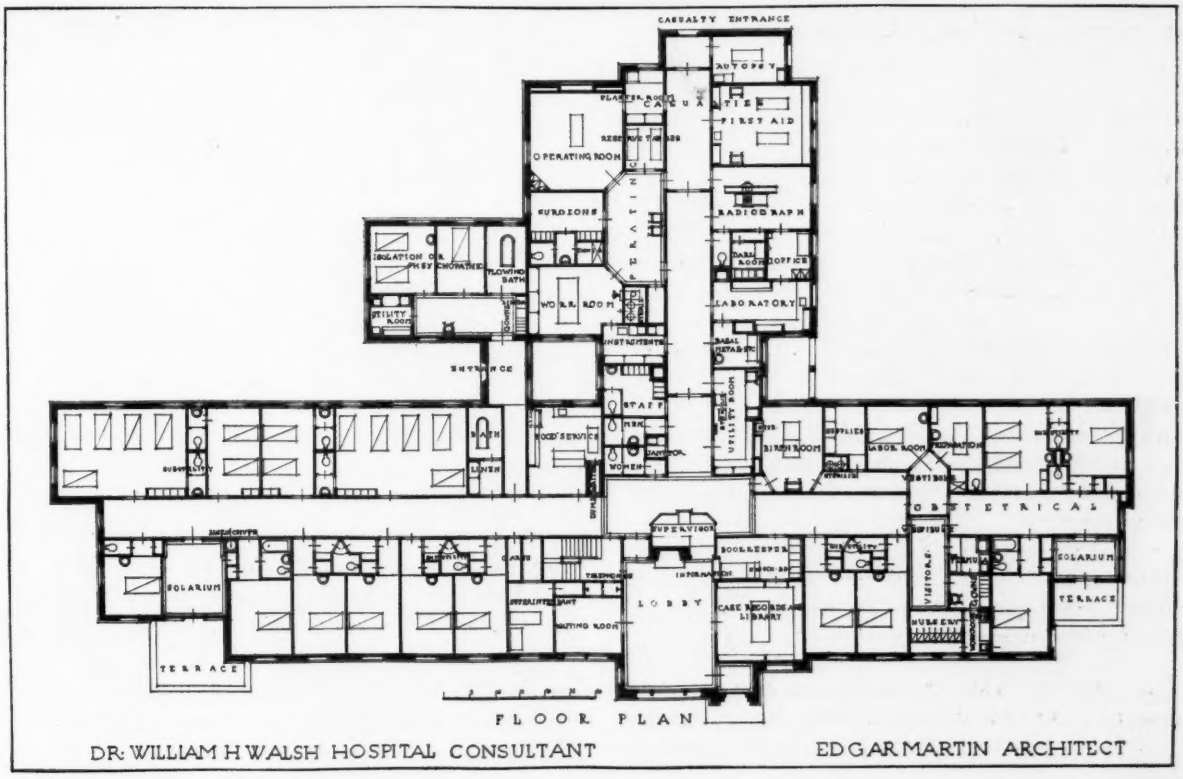
Psychopathic Accommodations

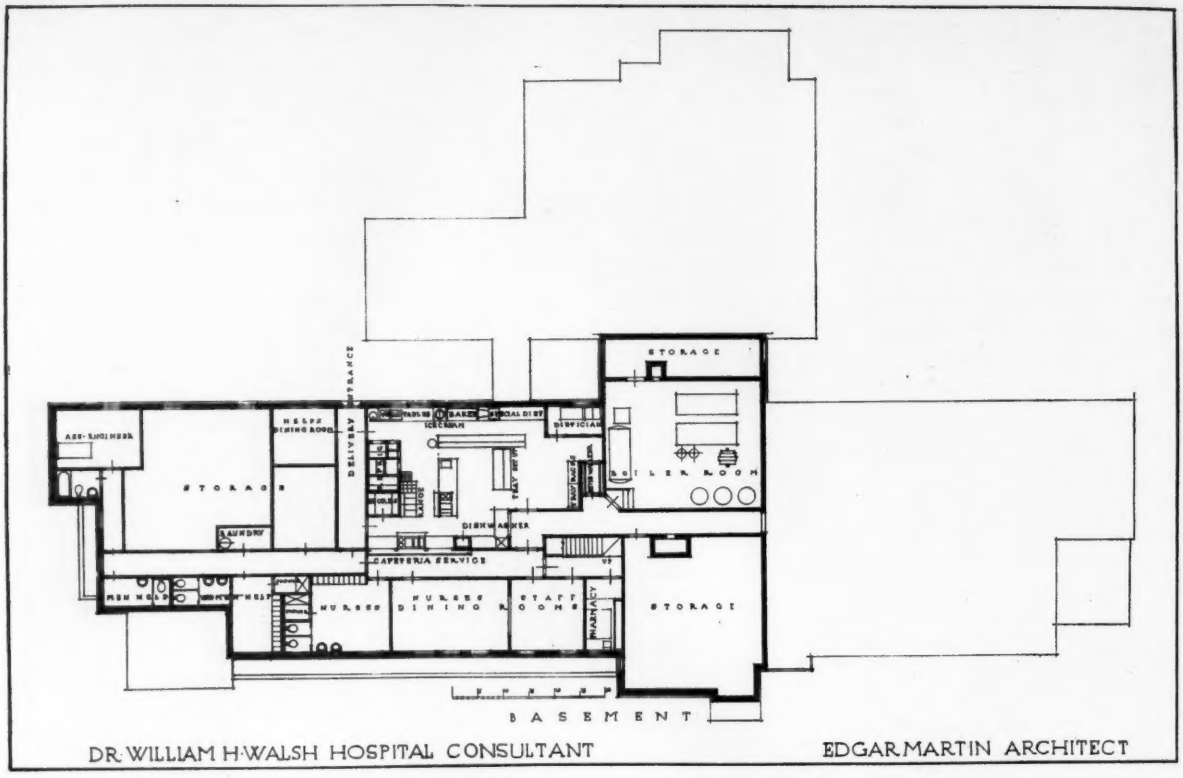
Even though a hospital has a very few rooms, there is no good reason why one of them at least cannot be designed for disturbed patients who are likely to harm themselves or others. The design of such a room is simple and if located adjacent to a bathroom, the tub therein can be equipped for continuous flow, so useful in handling this type of case. Rooms for disturbed cases should have built-in, completely covered radiators, windows should be glazed with non-shatterable glass, muntins sufficiently close and the opening so restricted as to prevent egress. There should be no projections of any kind within the room, no hardware on inside of doors, and these should open out and have a small non-shatterable glass panel at shoulder height giving the nurse full view of the room.

A room intended for psychopathic use should be simply furnished and devoid of any furniture that might be used for self-injury, such for instance, as mirrors and portable lamps. Lighting should be from an enclosed fixture in the ceiling and preferably controlled by an outside switch. As in the case of isolation rooms, if a suite of two rooms with continuous flow tub and sub-utilities between can be located within a sub-corridor, additional privacy may be gained. In the absence of psychopathic cases these rooms are particularly suitable for any type case requiring isolation.

General Facilities

The small hospital will require a suitable general office in which all of the business of the institution may be performed, and adjoining which should be the superintendent's office. In the very small hospital with limited personnel, the tele-





phone switchboard should be located so as to permit the operator to act as information clerk and office assistant. There will be required a kitchen and dining rooms, the number of the latter increasing from one for the entire hospital family in the very small hospital, to as many as six or eight in the larger institution.

The heating plant for a small hospital should consist of equipment sufficient to heat the structure and supply adequate hot water. It will usually use low pressure boilers and the plant will be built into the hospital structure. All equipment in the hospital requiring high pressure steam will use either electric or gas elements.

While we know hospitals of fifty beds and under with their own laundry plants seemingly giving satisfaction, we usually advise the smaller institution to contract with commercial laundries for this service until the capacity is such as to warrant the overhead expense of an independent laundry plant.

In this day and age the provision of adequate available parking space conveniently adjacent to the hospital cannot be ignored and unless such provision is made, the institution will suffer from congestion and noise from cars parked in every conceivable space close to the building. If the doctors' entrance can be so located as to be accessible to both parking space and their reception room it will be of advantage.

Doubtless construction costs will be discussed by others and so we will only say here that the cost of construction may be considerably decreased if the small hospital of 30 beds or under can be designed with one story and basement, but as the institution grows above that number of beds, a second story with an elevator will be required and costs per bed will be increased accordingly.

Even in the smallest hospital it is necessary to provide nurses' stations with medicine cabinets in strategic locations, fully equipped utility rooms, at least one serving kitchen, a waiting room for visitors and a suitable signal system. The structure should be insulated against the transmission of sound and every known means of acoustical treatment to both building and equipment should be applied.

In concluding this necessarily brief account of some of the principles of hospital planning we desire to show and describe a few sketches of a small hospital of about 30 beds which embraces most of the principles herein mentioned.

This hospital is proposed for a small town close to a large urban center, and, as will be noted from the elevation shown, an effort was made by the architect to design a pleasing exterior that differs

little from the aspect of a country club. It is one story in height with basement and, as will be noted from the main floor sketch, accommodates in addition to the 30 beds, all of the other essential facilities including detached rooms for isolation and psychopathic. The illustration of the lobby is an excellent example of what can be done to interiors to eliminate the drabness and severity so often encountered.

This structure is estimated to cost approximately $100,000 for construction, at present prices of material and labor.

Summary

1 The fundamental principles of hospital planning are the same for the small hospital as for the large institution, but many perplexing problems are presented in small hospital planning due to the limitation of space and funds.

2 The conduct of a community survey by a qualified consultant should precede the initiation of every hospital project and no new hospital should be inaugurated until such an analysis has indicated the community needs and has been submitted to all local agencies concerned for the determination of the public interest, convenience and necessity of the project. Under no other conditions is there justification for appealing for public support.

3 After it has been definitely determined that a new hospital is necessary and desirable, sound logic and economic factors dictate the employment of an architect of known successful experience in this specialty, and it is advantageous if the chosen architect maintains a staff adequate to enable him to handle the architectural and engineering details of the project within his own organization.

4 The services of a qualified medical consultant are essential to the proper design of the functional details of a hospital and his knowledge of these phases will prove an important factor in economical and efficient planning. He should possess extensive hospital administrative experience, an appreciation of community needs for the care of the sick, an intimate knowledge of the technical details of clinical procedures, a reasonable familiarity with architectural and mechanical problems, and the ability to apply this fund of information in such manner as to make it intelligible to an architect.

5 To assure thoroughness, planning should proceed in stages: first, the preliminary studies in which all concerned take part, with the medical consultant acting as adviser and coordinator. At this time differences of opinion are reconciled, general agreement is reached with respect to bed capacity, economic and clinical divisions, interior layout and articulation of departments, and finally approximate costs are ascertained. Second, after all studies are completed the working drawings and specifications are commenced and carried to their completion by the architects and engineers and the advice of the medical consultant. Third, final estimates are received, contracts let to responsible contractors and actual building operations commenced.

6 Immediately upon completion of working drawings and during the course of construction, the medical consultant prepares schedules and specifications covering every item of furnishings and equipment required for the proper operation of the hospital and these should be completed, bids let and deliveries arranged so that everything shall be in its proper place when the structure is completed.

7 The exact estimates of construction and equipment costs can never be accurately ascertained until working drawings and specifications are completed and costs will depend to a considerable degree upon the completeness of the drawings and the ability of the architect in the selection of materials. Preliminary estimates may be approximated after a planning program has been formulated, by estimating the cubage required, the number of beds to be provided and applying current cubage costs for this type of structure.

8 The essential facilities for the small hospital have been briefly discussed and an elevation and several sketches shown of a 30 bed hospital which demonstrate the ideas expressed herein.

The College of Saint Teresa Announces an Institute

The Department of Nursing Education of the College of Saint Teresa, Winona, Minnesota, announces an institute on examinations and other methods of evaluation to be held at the College of Saint Teresa in Winona, Minnesota, May 22, 23, 24, 1939. The registration fee is $2.00. Room and meals from Sunday afternoon, May 21, to Wednesday afternoon, May 24, will be $8.00.

Dr. Ralph W. Tyler, Professor of Education at the University of Chicago, will be the principal speaker on May 22. Other experts on testing will participate in the program.

Survey of the Ratio of Employees to Patients in Twenty California Hospitals

WILLIAM P. BUTLER

THE survey of the ratio of employees to patients in twenty California hospitals was made for the benefit of hospitals in that state, but is of interest to hospitals in other geographical areas.

The extraordinary range in service, as expressed by percentage of personnel to patients in various departments, is very difficult to explain. No doubt, superior facilities will enable some hospitals to render an excellent service with less help, but it is evident that in general hospitals, with relatively small numbers of employees in certain departments, there must be a relatively less service rendered by those departments. In the same manner, hospitals with excessive personnel in certain departments have an unwarranted overhead that must reflect itself in the cost to the patients.

Wide Variation in Hospital Operation

The figures in the following table indicate quite clearly that there is a wide variation in hospital operation and in the various departments constituting the institution. The twenty hospitals reporting are all private corporations operating without nursing schools. Realizing that there is quite a variation in salaries paid in all hospital departments, the figures give consideration only to the ratios of personnel to patients.

The Author

● **William P. Butler is the Manager of the San Jose Hospital, San Jose, California.**

In Column No. 1 we have the average number of patient days per month for each of the hospitals for 1938. You will note that the range is from 310 patient days to 6,740.

Column No. 2 explains itself. In Column No. 3 you will find the calculated per cent of all members of the nursing staff to the number of patients. The total average number of shifts per month of general and special duty nurses and

RATIOS FOR 1938 OF DEPARTMENT EMPLOYEES TO PATIENT DAYS IN CALIFORNIA PRIVATE HOSPITALS OF THIRTY BEDS OR MORE, OPERATING WITHOUT NURSING STUDENTS

All Figures Are Totals for an Average Month. Orderlies and Aids Are Included Under General Duty Nurses. Net Patient Days for General Duty Service (Column 4) Equals Total Patient Days, Less Count of One for Every Three Private Duty Shifts

	1	2	3	4	5	6	7	8
			PER CENT RATIOS TO PATIENT DAYS OF					
Hospitals	*Total Patient Days*	*Total Number on Payroll*	*General and Private Nurses*	*Gen. Nurses to Net Pat. Days*	*Maids and Janitors*	*Kitchen and Cafeteria Employees*	*Laundry Employees*	*All Employees (Daily)*
1.....	4,714.5	335	104.5	88.5	18.7	25.8	11.6	216.0
2.....	3,064.3	130	76.5	62.2	13.7	19.8	6.9	129.0
3.....	364.8	22	107.5	69.4	24.9	33.3	...	183.2
4.....	547.2	43	178.0	168.0	33.4	38.5	...	239.0
5.....	912.0	40	65.7	51.8	17.1	23.0	...	133.0
6.....	1,549.5	70	96.1	67.3	11.7	23.5	5.9	135.5
7.....	1,155.0	80	62.0	47.3	40.0	...	...	213.0
8.....	690.0	31	50.0	44.5	20.3	26.1	8.7	134.7
9.....	2,067.2	105	61.8	61.8	23.5	26.4	8.8	154.2
10.....	668.8	33	54.6	54.6	13.6	22.7	9.1	150.2
11.....	1,783.5	87	86.2	83.3	20.4	18.8	6.8	146.3
12.....	3,251.0	205	67.3	53.7	20.0	28.6	12.3	189.0
13.....	577.6	21	31.6	16.7	5.3	10.5	...	110.0
14.....	310.0	33	182.0	182.0	...	...	...	328.0
15.....	1,732.8	49	61.3	51.2	8.8	12.2	...	84.5
16.....	870.0	30	70.0	52.7	10.5	17.5	10.5	103.3
17.....	6,740.0	323	77.0	47.0	11.7	18.5	5.9	143.5
18.....	587.6	35	97.8	93.4	10.2	15.3	20.4	178.3
19.....	1,573.2	55	33.6	31.2	7.7	15.4	9.6	105.0
20.....	2,593.0	150.2	105.3	73.6	13.0	19.0	10.0	176.0
Totals	35,752.0	1,877.0	1,668.8	1,400.2	289.0	394.9	126.5	
Average	1,787.6	93.8	83.4	70.0	15.2	21.9	9.7	159.5

nursing aids and orderlies was divided by the total average number of patient days in the hospitals for one month.

In order to give cognizance to the fact that there is a wide variation in the relative number of private duty nurses used by the various hospitals, the special duty nurses were eliminated from consideration in Column 4 and the total average patient days for the month was reduced by one-third of the total special duty shifts for the month. Three special duty shifts are required to care for one patient for twenty-four hours and therefore for every three shifts there is the equivalent of one less patient for general duty service.

Columns 5, 6, and 7 explain themselves. We have in Column 8 the ratio of the number of employees on the payroll to the average number of patients per days in the hospital is given for each hospital.

Under Totals are figures for Columns 1 through 7 and under those figures are the averages per hospital. In Columns 3 through 7 we show an average of averages, which technically constitutes very poor statistics but since the figures are shown for each hospital there is the possibility of comparison.

The average for No. 8 was secured by first getting the daily average from Column 1 by dividing the total by 30.4 (1176.0) and dividing this into the total for Column 2 (1877).

As a result of this survey we show that in twenty hospitals ranging from thirty beds to three hundred, located in California and operating without student nurses, the average is 1.6 persons on the payroll for every patient in a hospital bed. It is true, there is a wide variation in the percentages—all the way from .84 personnel per patient to 3.28 per patient, but the removal of the extremes will not affect the average figure to any great extent.

There is one real advantage to the hospital administrator in looking over a chart of this kind, and that is to determine if his figures are justified wherever he appears to be greatly out of line. If his nursing costs are above the average, he may be reconciled to it if he knows that he is rendering a very superior brand of nursing. If his housekeeping averages are too low, it might be advisable for him to ascertain if he is keeping his place clean enough.

Low kitchen averages might mean superior layout and equipment or inferior service.

At any rate the individual operating a hospital who finds from comparison with other hospitals that in any one or more departments his ratios are extremes will undoubtedly want to survey that department in order to learn if the figures are justified.

Population Changes

The Bureau of the Census, under date of November 16, 1938, released an estimate of the population of continental United States of 130,215,000 as of July 1, 1938. This represents an annual increase of 0.7 per cent for each of the eight years since 1930 as compared to an average rate of increase 1.5 per cent per year during the decade 1920-1930 and of 2.3 per cent per year for the four decades 1880 to 1920.

The decreased rate of increase is attributed both to the decreased birth rate and to an actual net loss of 190,000 due to excess of emigration over immigration.

It is pointed out that as the rate of increase in population declines, the average age of the population increases. Such an increase in the average age of the population will result in readjustments of industry, particularly in manufactures of consumer goods, and even greater adjustments in public welfare services, particularly those relating to medical services, recreation, labor policies, and pensions.

There were reported during the eight and one-quarter years, from April 1, 1930, to June 30, 1938, a total of 11,825,066 deaths and 19,456,103 births, an excess of 7,631,037 births over deaths, or about five births to three deaths.

Average Length of Stay of Ward Patients Shortens

In the past five years the average length of stay of all patients has shortened one day (from 12.12 days in 1934 to 11.10 days in 1938). This shortening of the average length of stay has been due wholly to the shorter stay of ward patients (from 13.22 days in 1934 to 12.00 days in 1938).

The average length of stay of private patients has actually increased during the past five years from 10.05 days to 10.35 days.

—*Rochester General Hospital News Letter.*

Hospital Service Plan News

Prepared by the Commission on Hospital Service

Enlargements

Hospital Plan, Inc., formerly known as Central New York Hospital Service Corporation, Utica, New York, has moved its offices into space five times as large as that previously rented at 252 Genesee Street. At the end of its second year of operation, the Utica plan had enrolled 32,000 people, and was available in 12 counties, through 14 offices and 23 participating hospitals.

* * *

Associated Hospital Service of Boston has opened its fourth branch office at Lowell, Massachusetts, with Clyde McArdle as representative in charge. Their office is on the second floor of the Health Centre in Kirk Street.

* * *

On August 4, 1938, the Minnesota Hospital Service Association purchased the building at University and Raymond in which it had been housed for the past three years. At present the building is being remodeled to meet the demand for additional space necessary for the increased staff which the phenomenal growth of the Association has made necessary.

The Association offices will be on the first and second floors of the building instead of the third floor, as at present. Even using the ultra-conservative practice of "writing off" the building over a 25-year period (ordinarily 40 years) it is figured that this investment will effect a large saving over paying rent for adequate office space.

* * *

The Rochester Hospital Service Corporation has moved again, but is still at the same address. In its fourth move since organization, June, 1935, it has taken over the entire eighth floor at 30 Main Street, giving three times as much counter space.

* * *

It's in Print

On April 1, the printed report of the New York State Temporary Commission to Formulate a Health Program will appear.

* * *

The February issue of the *Virginia Medical Monthly*, published at 1200 East Clay Street, Richmond, Virginia, contains a long and most excellent editorial on medical economic problems, by Dr. J. F. Giesinger. In the section headed "Time for Action," he says: "If one could picture, therefore, a non-profit community organization, operating with a degree of liberality which can never be matched by commercial organizations and covering its territory with protection from the heartache and the financial load represented by both medical and hospital bills, it would seem that dawn might be breaking upon a darkened sky. The nucleus of such an organization already exists in the hospitalization plans; it needs but the whole-hearted cooperation of doctors and the continued sound management by the public-spirited business men already associated with these plans to expand them into the field of medical cost coverage also."

* * *

A new folder for mailing to industrial concerns not yet enrolled in the Toledo plan makes effective use of the letterheads of firms enrolled throughout the city and of a graph showing month-to-month enrollment since organization in April, 1938.

* * *

Mimeographed material concerning the non-profit group hospitalization movement is being made available to all Kiwanis members and the national headquarters office in Chicago has suggested a program for June especially devoted to the subject of group hospitalization by Kiwanis Clubs all over the country. The Commission on Hospital Service has furnished Kiwanis national headquarters with literature and a list of the executives of approved plans.

* * *

A paper entitled "Dangers and Benefits of General Hospital Care Associations," to be presented by Dr. Byrd Charles Willis at the Carolinas-Virginia Hospital Conference, April 14, has appeared in the February issue of *Southern Hospital.*

* * *

The Associated Hospital Service of Baltimore, at the close of its first year's operation, dramatized its accomplishments and possibilities in an attractive brochure entitled "The Bridge," which was sent to all service plan directors. This clearly illustrated booklet gives a Fact-Picture of the Hospital Service Plan during 1938, from which we learn that during the first year, the plan provided service for 1,824 patients who stayed an average of 8.5 days each or 15,500 days in all. If all this hospital care had been needed at one time, these patients would have filled every private and semi-private room in Baltimore's hospitals for a week and a half!

Reprints of the talks by Louis Reed, Basil MacLean and Frank Van Dyk, given at the Group Hospitalization Section meeting in Dallas last September, are now available and have been mailed to all plan directors, hospital and medical magazines and several other groups. A reprint of C. R. Rorem's talk at the New England Hospital Association, March 8, 1939, which appeared in the *Bulletin* of the Chicago Hospital Council, is also available.

* * *

Recent Activity of the Commission

After the Cleveland conference of hospital service plan executives, each director was requested to let the Commission on Hospital Service know whether or not he was willing to release his code number (used in statistical and financial compilation) to other plan directors. Only 12 plans have been heard from so far.

* * *

During the past month the service plan directors were asked to give their first, second and third choices for a new title for the old Council on Hospital Care Insurance. Each first choice was allotted three votes, second choice two, and third choice one. Final votes stood as follows:

Council on Hospital Service Plans	90
Council on Group Hospitalization	51
Council on Group Hospital Service	49
Council on Plans for Hospital Care	43

Henceforward, the Council will be officially known as Council on Hospital Service Plans.

* * *

A mimeographed statement of each non-profit hospital service plan's agreements for reciprocal enrollment was mailed to each plan director on March 16. This will be revised when changes are voted by any approved plan or when new plans are organized and added to the list. Only four plans definitely refused to effect reciprocity agreements and five others have not made a decision. Of the remaining plans agreeing to enroll subscribers of other approved plans who might move into their territory, 15 agreed to do so without requiring the subscriber to observe once again the usual waiting periods for maternity care, tonsillectomies, etc. In the words of the director of the Chicago Plan for Hospital Care, "Membership in another approved plan will be accepted as the equivalent of membership in determining eligibility to receive maternity care." Thirty plans will enroll subscribers as individuals transferring from other approved plans, but will insist that these subscribers observe their waiting period for maternity benefits.

* * *

The Piedmont Hospital Service Association, Peoples National Bank Building, Lynchburg, Virginia, C. Raine Sydnor, executive director, was approved as to form of organization by the Commission on Hospital Service.

* * *

The Michigan Society for Group Hospitalization, Washington Boulevard Building, Detroit, John R. Mannix, director, and the Tri-County Hospital Service Corporation, Johnson City, Tennessee, J. E. Brading, director, have applied to the Commission on Hospital Service for approval as to form of organization.

* * *

Proceedings

The *Proceedings of the Mid-Winter Conference of Hospital Service Plan Executives* appeared during the month of March. The Commission on Hospital Service distributed this to service plan directors and all those in attendance at the convention.

This 80-page brochure contains articles on the following subjects by personnel in the group hospitalization field: Public Education by E. A. van Steenwyk, Gertrude Dacken, George Ludlow, Edward C. Ames; Employer Contacts by Sherman Meech, J. A. Durgom, Robert Parnall; Accounting by Carl Metzger, Ed S. Moore, D. Lane Tynes, Louis Degenhardt; Acquisition Costs by Ray F. McCarthy, Edward Evans, Earl R. Sweet; Enrollment of Medical, Hospital and Nursing Personnel by J. D. Colman, Lucile Bennett, Donald Murphy, R. F. Cahlane, Maurice Norby; Problems of Small Cities and Rural Areas by H. V. Maybee, Clement W. Hunt, J. O. Thorpe, Paul Bourscheidt, R. E. Johnson, as well as C. Rufus Rorem's paper on Recent Developments, and Msgr. M. F. Griffin's talk on government influence which made an appearance last month in *HOSPITALS*.

* * *

Recent Speeches

At both the Third Annual Tennessee Industrial Personnel Conference and the Tennessee Conference of Social Work in Nashville, George W. Eutsler of Kingsport, Tennessee, spoke on the subject of group hospitalization plans.

On National Hospital Day, May 12, the White Cross Guild of Fort Wayne, Indiana, is sponsoring a luncheon at which John A. McNamara will speak on "The Cleveland Plan and the Way it Works."

At a citywide mass meeting in Little Rock, Arkansas, on March 6, Ray McCarthy of St. Louis addressed a large group on the subject of voluntary hospital care insurance.

Dr. J. Harvey Jennett of the Jackson Medical Society and Elmer Ahlstedt, superintendent of

Trinity Lutheran Hospital, spoke at a panel forum devoted to group hospitalization at the Community Church of Kansas City, Missouri, on January 15.

On March 7, both the Rotary and Kiwanis Clubs of Pittston, Pennsylvania, which sponsor orthopedic and dental work in Pittston Hospital, held a joint session at the time of their annual visit to the hospital. George T. Bell, executive director of Hospital Service Association of Northwestern Pennsylvania, was the principal speaker.

Service Plans and the Indigent

It has been suggested that governmental agencies responsible for special groups (such as old-age pensioners, WPA employees, relief clients, and creditors of the Farm Security Administration) might enroll their beneficiaries in non-profit hospital service plans. Governmental agencies are, of course, financially able to establish and operate funds for purchasing care directly from the hospitals in which services are received. Yet an efficiently administered hospital service plan might serve greatly by handling funds, approving hospital admissions, and crediting subscriptions for beneficiaries of the government. In this way, persons enrolled during the period of dependency could remain protected after they return to private employment.

No arrangements between governments and approved non-profit plans have yet been established for the care of indigent groups.

Federal and state governments probably will not pay for relief clients the amounts being received from regularly employed persons in the hospital care insurance plan. There will probably be required certain adjustments both as to rates from the subscribers and rates of payments to the hospitals.

Payments to New York Hospitals

The New York State Department of Social Welfare has approved a temporary 25 per cent reduction for the months of April, May, and June in the per diem payments to hospitals for services to patients who are subscribers to the Associated Hospital Service of New York. Notice of this temporary change has been sent to the participating hospitals and the adjusted rates will apply to all patients admitted April 1, 1939, or later. Subscribers to Associated Hospital Service will receive the full benefits stated in the hospital service contract. Payments to hospitals will be adjusted upon future recommendations by the Board of Directors and representation of hospitals through a hospital advisory committee and the Department of Social Welfare. The action of the hospitals in continuing the services to subscribers demonstrates clearly the fundamental character of hospital service plans, namely, a nongovernvent form of social insurance. The subscriber is fully protected from the possibility of assessment or failure to receive institutional care.

Expanded Services

Hospitals which have recently become participating members of approved hospital service plans are as follows:

St. Joseph Hospital, Eureka, and Trinity Hospital, Arcata, in the Inter-coast Hospitalization Insurance Association of Sacramento, California.

* * *

Victory Memorial Hospital of Waukegan, Illinois, in the Plan for Hospital Care of Chicago.

* * *

Providence Hospital of Beaver Falls, Pennsylvania, in the Hospital Service Association of Pittsburgh, along with the two other voluntary hospitals in Beaver County, the Beaver Valley General Hospital and the Rochester General Hospital. For the past year and a half, Providence Hospital has operated a plan of its own, and with its discontinuance, members will be given an opportunity to transfer their subscription to Hospital Service Association of Pittsburgh without meeting any usual enrollment requirements. Letters informing these persons of this action have been mailed to them and a representative has been assigned to the hospital to handle these changes. All others in this locality, however, wishing to become members, must enroll in groups through place of employment.

* * *

The Board of Trustees of Group Hospital Service, Inc., of St. Louis, Missouri, has approved the requests of Levering and St. Elizabeth's Hospitals at Hannibal, Missouri, to become participating institutions. These additions now bring the total number of hospitals guaranteeing service to members of Group Hospital Service, Inc., of St. Louis, Kansas City and Alton to 59. Arrangements are being worked out by the Hospital Committee of the board to form a policy for acceptance of privately-owned hospitals throughout the state which desire to become participating hospitals.

Recent Developments

The Associated Hospital Service of Philadelphia, 1429 Walnut Street, now lists as member hospitals 40 institutions within the city's corporate limits—these hospitals representing 91 per cent of Philadelphia's total voluntary hospital bed capacity. Requests for membership contracts have been received from several of the 12 remaining hospitals, which provide 9 per cent of the voluntary hospital bed capacity.

In addition to hospitals of metropolitan Philadelphia, the non-profit "three-cents-a-day" hospital service plan has affiliated 14 hospitals in adjacent Delaware and Montgomery counties and in the Camden, New Jersey, area.

Hospital bills totaling approximately $50,000 have been paid for nearly 1,000 subscribers in 44 of the participating hospitals. Subscribers are now being treated at the rate of 125 per day. The Philadelphia organization reached a total enrollment of 100,000 fully-protected subscribers as of March 15. It has been in operation since November 7, 1938.

* * *

Employees of the Zinsmaster Baking Company in Duluth dropped the hospitalization portion of their group policy issued by a well-known commercial insurance company. One hundred of the 130 employees have voluntarily enrolled in Minnesota Hospital Service Association.

* * *

The Plan for Hospital Care of Chicago had enrolled 100,000 subscribers and dependents on March 11, 1939.

* * *

A conference of field secretaries of Group Hospital Service of Missouri was held in Jefferson City on March 8, under the direction of Walter McBee. A luncheon was held, to which members of the Jefferson City Advisory Council, the local medical society and representatives of the hospital were invited. Discussion of such problems as volume enrollment, competition, systematic reports from field men, requests for ward service, enrollment of church groups, was so successful that it is planned to repeat this type of conference regularly in other parts of the state.

* * *

New regulations covering additions to already enrolled groups were announced by the Cleveland Hospital Service Association. Additional subscribers can only be enrolled now during a designated two-week period twice each year instead of any time after a 60-day waiting period, as in the past.

* * *

The Rochester Hospital Service Corporation is now providing Collection Group agents with individual receipt forms to be signed and given to members at the time they make their payments to group collectors.

* * *

The recent flu epidemic in Chicago caused an increase in hospitalization of 33 per cent under Plan for Hospital Care for a period of twenty days. The total number of flu patients hospitalized was 162.

* * *

The Associated Hospital Service of Nebraska opened offices at 402 Omaha National Bank Building on February 1, with J. H. Pfeiffer as Executive Secretary. This organization, sponsored by the Omaha Hospital Council and said to have the approval of the Omaha Douglas County Medical Society, secured a charter from the state of Nebraska as a mutual insurance company, but the officers of the corporation are actively engaged in seeing a model enabling act through the state legislature which is now in session.

* * *

The Northern Illinois Hospital Service, Inc., has received its charter from the state and has opened a temporary office in the Gas Electric Building, Rockford, Illinois. Contracts will probably be issued by May 1.

Meetings

The New York State committee on rural health service met at luncheon in Syracuse on Friday, March 10, when C. Rufus Rorem was in the city to discuss new methods of enrolling farm groups in hospital service plans. Several farm bureau and grange representatives were present, as well as the following hospital service plan personnel: Edson P. Lichty of New York City, Sherman D. Meech, Rochester; Harold C. Stephenson, Utica; W. W. Seymour, William A. Frost, J. C. Butler and Albert M. LeMessurier of Syracuse; Thomas D. Shephard, Elmira; William Heslop, Watertown.

* * *

The Southeastern Hospital Conference which meets in Jacksonville, Florida, April 13 to 15, will devote all of Saturday morning to discussions of the group hospitalization movement. Among the speakers are three service plan directors; Ed S. Moore of Birmingham, Alabama; C. J. Anderson, Atlanta, Georgia; and Edward Groner, New Orleans.

* * *

At the annual meeting of the Carolinas-Virginia Hospital Conference at Roanoke, Virginia, April 22, the afternoon session will be devoted to group hospitalization. Following a speech by Frank Van Dyk, there will be a panel discussion on the following topics:

Is a hospital benefited or penalized by participation in a plan?
Should there be more than one plan in an area?
Should plans extend their territory to full extent of their trade area?
How should a hospital be compensated?
Should ward plans be developed for the low income group?

Shortcuts to a Balanced Budget

R. D. BRISBANE

THE goal of all hospital management, consistent, naturally, with adequate care, food, and accommodations for guests and adequate wages and food for personnel should be "Maximum hospitalization at minimum cost." The more flexible our organization, in order to meet the demands of all classes of wage earners, the greater is our patronage and the larger our sphere of usefulness.

Too often economy is being sought in the wrong places resulting in lowered standards or disgruntled employees. The remedy for a balanced budget more often lies in watching "leaks" where careful management will produce the additional revenue needed. Following are some of the shortcuts gleaned from seventeen years of experience.

Free Supplies to Floors

It is axiomatic that every hospital should have all stores under lock with nothing taken out except by requisition and proper charge, but many executives do not realize that one of the worst leaks are the drugs, dressings, and other store supplies being furnished free of charge to floors to use in rooms and wards. Aside from the fact that it is hardly fair to have a flat rate covering all these supplies when one guest will use one dollar's worth while another uses ten or twenty dollars' worth of dressing in a bad drainage case, there is the continual erroneous education of the nurse or other employee to the free use of such supplies. In many cases it will be found that the guest who could easily pay for everything extra is not being charged even though his room charge is much less or barely covers actual nursing care and room and board.

The remedy lies in having proper requisitions for every department supplying nurses' stations with anything that is for general use. Monthly totals of requisitions by departments will yield some startling figures. Weekly or monthly notices to supervisors will yield remarkable savings. Graphs may be worked out and posted at each station.

It will be found that from ten to twenty cents worth of supplies are being furnished daily to each person, meaning $4,000 to $8,000 worth of supplies annually in a hospital averaging one hundred patrons a day. A saving of five cents a day for each guest will mean nearly $2,000 for the year, and this, or more, can be saved easily.

The Author

● **R. D. Brisbane is Superintendent of the Sutter General and Maternity Hospitals, Sacramento, California.**

Central Supply Room Imperative

Any hospital averaging fifty or more guests daily can well afford to have a centrally located supply room. Duties of the one in charge can be combined with some other department if necessary. The supervisor should be a nurse with several years of surgical experience, and with a natural business sense for collecting on everything that goes over the counter, or obtaining signatures in case of borrowed articles.

Here should be kept all preparation trays of every type, all rubber goods, intravenous sets and solutions, sterile dressings, and every other kind of equipment requiring technical skill for maintenance or preparation. In fact, everything for general use on floors can be cared for and kept in order in this room. All hypo needles can be sharpened here; croup kettles kept clean; all fracture equipment and oxygen tents kept in repair and order for immediate use; and attending charges watched. As a rule, rubber goods especially are criminally neglected; no one ever seems to know who left them lying on a radiator or next to some oily dressings. Where a signature is obtained for borrowed equipment, a particular person is responsible for its return in good condition and everything used above a set maximum is charged directly to the guest. Breakage of thermometers and other expensive apparatus can be checked and charges made. It is surprising how much less is broken when there is a charge made for breakage. Several times the full cost of operation can be saved yearly.

Generation of Electricity

Where electricity for lighting costs from two to three cents the kilowatt, and high pressure steam must be produced, from thirty to fifty per cent of the cost can be saved by buying a steam engine and dynamo, using the exhaust steam for heating the building or water. Stand-by current can be used during hot summer months when

savings would be smaller by operation. Generation of current on hospital grounds often proves of value when there is some interruption on the public utility system.

Automatic Machinery

Automatic machinery such as elevators, stokers, air conditioners, and other equipment not only make for efficiency but help to cut overhead costs. A new automatic elevator, for instance, costing $10,000 could be purchased with the savings over five years compared with manual operation. Reliable automatic air conditioners providing exact temperatures summer and winter, with low pressure gas or oil-fired boilers, that require no attention but the change of filters once a year and the oiling of motors once a month, by a janitor can be obtained for hospitals up to one hundred beds or more.

Best Mechanics Cheapest

Just here it might be mentioned that the best engineers obtainable are the cheapest when high pressure steam is necessary, or where the size of the plant warrants their presence for maintenance. If an engineer is also a skilled master mechanic with shop experience, so much the better, and any wage within reason for the right man is well spent for he can save, in repairs and making new apparatus such as fracture beds and other equipment, any sizable institution many times his salary. Where two or more engineers are required, one with steel lathe and mechanical experience and another with all-round electrical experience, make an excellent combination. Too many hospital managers try to economize in this department and then wonder why boilers must be replaced, why accidents happen to expensive machinery, and why other repairs with outside craftsmen's high bills are necessary.

Machinery often can be obtained secondhand such as a lathe, drill presses, or other motorized tools. An experienced mechanic can realign and babbitt the bearings and buy a new gear or two, making machines as good as new. Our own engineers have made over a $1,000 lathe that cost $250; reconstructed a $2,500 direct-connected engine and generator that cost but $750; besides making twenty-five all-steel fracture or Bradford and Balkan frames with junked Dodge car steering gears for lifting devices, that would have cost $250 each; besides hundreds of other smaller new devices and repairs.

Comparative Summaries

Over fifty per cent of all expenditures in a hospital are for salaries. By keeping this expense departmentalized in a comparative monthly summary, the superintendent will know at a glance just how much each department is using for salaries. Another summary should be kept for all expense of supplies furnished to floors, already mentioned; and another for every item of food, month by month. Allowance for variation in prices, together with computation of meal costs, and this summary, give a most accurate picture to the executive of the second greatest outlay from revenues.

Most valuable of all comparative summaries, is a monthly or yearly columnar digest for the per diem guest cost. If books are properly kept, every department at the end of each month shows the total salaries or supplies used by that department, such as powerhouse, laundry, kitchen, housekeeping, x-ray, laboratory, business office, floor nurses, aides, interns, etc. Dividing the total monthly or yearly cost of each department by the total number of guest days of the month or year, provides the truest picture obtainable of the complex hospital organization, a comparative picture that becomes more valuable with each passing year.

Dietary Dividends

Until nearly all of the bakeries began slicing bread, a twenty per cent saving on the bread bill could be effected by buying a slicing machine. Where institutions bake their own bread, machine slicing in place of hand slicing would also effect a saving.

Another saving of nearly thirty per cent on the cream bill can be obtained by using one portion of evaporated milk to two portions of whole milk for coffee cream for the employees' dining room. At least two brands of milk now on the market have very little of that cooked flavor, and together with whole milk provide as many calories as the usual coffee cream.

An electric coffee grinder can be obtained that produces much better coffee for all the institution when the coffee beans are purchased properly roasted, and ground fresh every morning for the cup that cheers.

A well-paid chef who is a good meat cutter will save his wages many times over during the year through using up a quarter or more of a steer, instead of buying it already cut.

Fresh vegetables and fruits if purchased through a small dealer who is honest and willing to take a fair profit for his labor, will have much better quality at huge savings compared to purchases through commission houses with heavy overhead and all types of employees filling orders.

Almost any size hospital can save forty per cent or more of its ice cream bill by buying an electric freezer and either buying their mixture or making it themselves. In addition some forty kinds of frozen desserts may be made.

Weighing garbage to check waste is nothing more than locking the garage after the car is stolen, and is a waste of time and labor. Control should start with the preparation of food and carry through until it has been *eaten.* Properly prepared, seasoned, and served food will not be coming back to be dumped in the garbage.

Running either guest trays or employees' dining room on a rigid "budget" is the best way to cause waste of food. Variety, seasonable fruits and vegetables, and use of properly prepared leftovers, need not cause too high meal cost but they will mean contented patrons and personnel.

It is quite as much the manager's duty to watch the menus as it is the chef's and the former should acquaint himself with every step in the preparation of food, if he has not already, and *know* what is good, well-seasoned food. Frequent visits to the kitchen to see if potatoes are being pared too thick, or butter or other supplies wasted, help dietitian and chef in their efforts and are a good example to employees.

Just here may we add that it is the writer's most emphatic opinion that the successful superintendent of any hospital whether large or small, will be found outside his office a large share of the time, making daily and nightly visits to every department, getting acquainted with every employee, listening to their suggestions, hearing their complaints. The lure of the swivel chair is the most expensive habit in which any executive may indulge.

Making employees pay at least half of dish breakage during handling teaches them habits of thrift. On the other hand, employees so penalized should be paid as much or more than similar occupations outside. Our per diem guest cost summary shows a drop from $.024 the day to $.005 by this method, meaning a saving of $720 annually for each one hundred guests.

Housekeeping Economies

One of the most costly maintenance routines in many hospitals is waxing of floors, the cost of labor being entirely too heavy for the unsatisfactory results, as it takes at least one porter's entire time for a hospital of one hundred beds. Wax not only is very unsanitary because it catches and holds the dirt, but fails in protecting the linoleum, wood, or other composition under it except from traffic wear. Metal gliders on furniture form an oxide leaving dark spots almost impossible to remove. Alcohol and other medications in the guest room leave their marks on the wax or permanent disfiguration of costly floors. In place of the wax, clear or colored varnishes and lacquers are available that are impervious even to concentrated nitric acid, and that will stand up under the heaviest traffic for six months or longer. For new floors especially such varnishes are the best protective coating available. They are quickly applied, dry overnight, and renewal of the floors will cost but three or four days of a painter's time for 30,000 square feet of floor, equivalent to one hundred rooms and connecting corridors. This means another saving of well over $1,000 yearly for above area.

Heavy losses are incurred because linens are not purchased on specification of thread count, textile strength, and weight. Garments like nightingales and surgeons' gowns are purchased only as so many articles with little thought given to quality of cloth, thread specifications, or number of stitches to the inch. Thread especially has much to do with life of the garment, size and whether common or cable twist, if specified, meaning at least a third difference in wear. Some hospitals charge ten cents for each nightingale placed on a guest for washing and depreciation, meaning additional annual income of $3,600 for one garment daily to an average one hundred guests. Where low room rates are the rule, this extra charge is no more than just, for the nightingale replacements are a heavy expense in most institutions.

Financially Speaking

As stated previously, an open door to the manager's office means better efficiency, but produces as well some otherwise unknown dividends. The salesman who is courteously greeted and given a chance to tell his story, often has some bargains. And, if the hospital is known for its prompt payments, it will be given advantages some others do not enjoy when vendors have goods they wish to move at cut rates.

It is just as easy to take discounts for cash as it is to be always three months or more behind, believe it or not! It means a little intestinal fortitude to economize until all bills are caught up and then caution to see that thereafter they are paid in ten to thirty days. All vendors have to charge in one way or another for deferred payments, and increased prices generally are the penalty to slow pay hospitals, besides the loss in discounts and bargains as noted. Large sums can be saved by cash purchases, running over $1,000 yearly for the example of one hundred bed hospital.

Study of insurance rates and policies often

yield some surprising revelations of how good friends (?) who are brokers for a hospital are padding their own pocketbooks.

Reappraisals of property may yield tax revisions. A change from profit form of organization to non-profit means better support from the public and savings in income taxes.

Watching collections means the difference between a surplus or deficit in yearly operations. A good credit man will more than earn his salary many times over for any institution doing $100,000 of business annually. His duties may be combined with those of bookkeeper or other office routine. Where bad debts are running two per cent or more of total income, something is wrong that should be remedied at once. With proper credit methods bad debts should never run over one per cent. One per cent savings on collections for foregoing income means another $1,000 annual saving.

Careful analysis of laboratory, x-ray, or other departments being operated by outside doctors, often will reveal that the hospital is the consistent loser on the common one-third of income to the leasee basis with the hospital paying all expenses.

In computing overhead for each department, all taxes, insurance, light, heat, power, janitor service, depreciation, and other total annual expense, chargeable to an office building, should be divided by the total square feet, including columns and partitions, in a hospital. This divided again by twelve, the months of the year, will yield the monthly rental that will run from ten to twenty cents the square foot as a rule.

The possible economies listed are but part of those which will help balance expense against income. Continued circulation among the departments together with comparative summaries as enumerated will present many more.

National Hospital Day

The National Hospital Day Committee reports that a greater number of hospitals are planning to celebrate National Hospital Day in 1939 than in any previous year.

Realizing the value of National Hospital Day from a publicity standpoint, the hospitals are preparing to stage interesting programs for the entertainment of their friends and guests on May 12.

At the San Francisco World's Fair, the hospitals of Northern California are planning to have May 12, set aside as a feature event. A statue of Florence Nightingale will be unveiled at the Golden Gate International Exposition. The Honorable Angelo J. Rossi, Mayor of San Francisco, and the Honorable Leland W. Cutler, President of the Exposition, together with distinguished representatives of the hospital and nursing world, will deliver addresses on this occasion. The entire program will be broadcast over national network. In the evening in the Amphitheatre, on the Exposition grounds, George U. Wood, superintendent of the Peralta Hospital, Oakland, will present his picture, "Behind the Scenes in a Modern Hospital."

The statue of Florence Nightingale measures nine feet, four inches, and the material used is cast stone. After it has served its purpose at the Exposition, it will be a permanent replica placed in Golden Gate Park, San Francisco, as a fitting memorial to this distinguished nurse.

Appropriate exercises for the New York World's Fair are under discussion, and the program will probably be arranged within the next few days.

"Nisi Dominus Frustra"

There is a hospital serving the needs of every community. Under the supervision of a superintendent and department heads, an institution specializes on local problems, whatever they may be. Each department in the hospital is solving special problems with the means available.

The single purpose of the hospital in each community united with the purposes of every other hospital in the world forms one broad purpose—the care of the sick and injured and the prevention and alleviation of physical distress to which humanity is heir.

This unity of purpose is the foundation upon which is built the American Hospital Association. One helps to serve all and all help to serve one. The Association is composed of those elements which comprise one of the most important units in organized society.

By this means those whose lives are devoted to the administration of hospitals are banded together in one common purpose.

The purpose of this union is set forth in a constitution and in by-laws which form an organization administered by elected officers.

Naturally such an organization must be articulate. The voice of the Association is expressed through *HOSPITALS*, the Journal of the American Hospital Association.

Each month hospital executives all over the world receive this publication and have access to a broad sum-total of thought, experience, and action. The authors, each in his own specialty, cover all divisions of hospital work.

Some Practical Aspects of Air Conditioning in Hospitals

ANCEL KEYS

DISCUSSION of the practical aspects of air conditioning should be made in terms of each individual hospital and would emphasize the questions of patient welfare, economics, and the personal bias of trustees and others influential in the direction of hospital programme. We will attempt to analyse the facts which should be taken into account in any specific case.

We can treat the subject by posing a number of questions and devoting some discussion to each of these in turn. The primary practical considerations in the question of air conditioning in hospitals may be summarized:

I Why are you interested in hospital air conditioning?
II What is air conditioning?
III What good can it do?
IV What good can it do in your hospital?
V What kind of air conditioning, if any, is desirable for your hospital?
VI How much will it cost to install and opate?
VII Is it desirable and economically feasible for you to install air conditioning equipment?

Questions as to the mode of action of alteration in the air, on people under various conditions, are of much interest but they are not considered in the present discussion. Likewise, there are many questions of engineering principles and different mechanical apparatus to bring about air conditioning, but these should only be considered seriously once a decision has been made to install air conditioning. We shall consider in some detail the "primary considerations" listed above.

I Why Are You Interested in Hospital Air Conditioning?

We cannot intelligently consider air conditioning until we know the reasons for your interest in the subject. These reasons may be classified into two groups, personal and external.

Personal—I should suggest that it is desirable for you to decide in what direction your personal interests tend:

Presented at the Institute in Hospital Administration, University of Minnesota, Minneapolis, January, 1938

The Author

● Dr. Ancel Keys is Associate Professor of Physiology, University of Minnesota, Minneapolis.

1 Comfort of the patients
2 General benefit to health apart from comfort
3 Specific applications to particular diseases or conditions (such as asthma, decompensated heart disease)
4 Increased efficiency of the staff of the hospital
5 The possibility of increased business
6 The general sympathy for the idea as "progress"

External—External reasons for your interest may be more compelling than purely personal considerations. Pressure may be, or perhaps already has been put on you to think about the desirability of installing air conditioning:

1 Pressure from trustees and other individuals who have some control of your hospital.
2 Pressure from members of the hospital staff.
3 Pressure from patients and the community at large.

One and two bear some resemblance in that relatively few individuals are concerned, and personal idiosyncrasies are important and their connection with the hospital is relatively permanent. Having ascertained the facts of air conditioning, it is, in most cases, possible to consider them in extended discussions with the interested individuals in 1 and 2. In common with many nonexperts in this field, trustees and members of the hospital staff are unlikely to be informed accurately about air conditioning. I should suggest that where possible you should attempt to induce these influential individuals to analyze the local situation in something like the terms which I am attempting here.

The problem of pressure from patients and the community at large is quite different. The short period of connection of the patients with the hospital and their large numbers makes it impossi-

ble to explain to them why you do not put in air conditioning, or why your system does not do certain things which the patient wants. Pressure from the community at large may be quite effective, but it is difficult for you to meet it. If, for example, there is a considerable element in the community that thinks your hospital is old-fashioned or inefficient because it does not have air conditioning, there are only three things you may do about it:

1 You may attempt to provide air conditioning.

2 You may choose to ignore the sentiment of the community.

3 You may conduct a campaign to show why you are doing as you do.

It is well to realize that popular opinion may be relatively inaccurate but that you can rarely afford to ignore it. The general popular argument for air conditioning runs something like this: "We believe in progress. Progress means the introduction of new things. Air conditioning is a new thing. Therefore, air conditioning is desirable." It is your business to force a more reasonable analysis to be made.

II What Is Air Conditioning?

Full and complete air conditioning would mean the provision of absolute control of temperature and of humidity, removal of dust, pollens, etc., and the maintenance of air circulation. It is possible that in the future other qualities of the air will be controlled; for example, the air may be "conditioned" with regard to ozone, the electrical charge on particles in the air, and so on. A special type of air conditioning is already widely used in hospitals in particular conditions. I refer to oxygen and carbon dioxide therapy. The future may see installations of a larger type for purposes similar to those now served by oxygen tents and nasal catheters. Another provision in air conditioning, which is already assuming importance in Europe, is protection against poison gas. Fortunately, we need not consider this question in the United States as yet.

From the standpoint of engineering and the equipment needed air conditioning should be considered under a number of subdivisions.

Circulation and renewal of air—The provision of an adequate supply of oxygen is popularly supposed to be important; actually, limitation of oxygen is never of moment except possibly in conditions where oxygen therapy would be indicated. Accumulation of carbon dioxide in the air is not entirely negligible, but again it is rarely of consequence. Circulation and renewal of air in general is much more important for the removal of odors and particularly to provide air movement *per se*. The removal of odors may be primarily an esthetic consideration but unquestionably the persistence of unpleasant odors may have a deleterious psychological effect. Air movement is important because it is now well recognized that movement of air on the body, particularly on the face, has a stimulating effect, it improves the respiration and is responsible for much of the "tonic" effects observed at Alpine resorts.

If the only attempt toward air conditioning is to be the circulation of the air, the problem is quite different from where a fuller program is to be carried out. Practically all air conditioning involving control of humidity requires a high rate of circulation of the air in order to be effective. The design of the building is also important because buildings differ very much as to the adequacy of circulation obtained naturally, even when windows are open. It should be noted that if summer time cooling is to be supplied it is necessary to seal the building and thereby eliminate the natural circulation which would obtain otherwise. A cooled building will require a greater capacity for the air circulating system than the ordinary building.

Filtration—Circulation of filtered air would probably be desirable in all hospitals, especially in the major urban centers where the dust and particle content of the air may be very high. Filtration of the air to remove suspended particulate matter may be desirable from a number of different considerations.

1 Air-born infections generally mean that the infecting organisms have been carried on suspended particulate matter in the air. Bacteria and spores may alone form a part of the suspended matter in air, but in general dust particles are the principal means whereby bacteria or spores may be carried in the air.

2 Filtration of the air provides very great relief in many cases of respiratory allergy, such as the ordinary hay fever.

3 Injurious materials, such as silica dust, soot, and carbon granules, etc., may constitute a health hazard in some industrial areas which should be avoided by hospitals.

Very elaborate means are required to remove all particulate matter from the air, but it is very simple to remove say one-half or three-fourths. In many cases a simple system of baffles in the air conduits will remove nearly all of the dust. Industrial smokes, on the other hand, frequently re-

quire a large number of efficient filters for their removal. This has been well shown in recent studies on protection against poisonous smokes used in warfare.

Heating—Central heating plants are common to all hospitals in this region. It is probable, however, that there are still many hospitals which do not have automatic heating control. Any system which attempts to provide something like air conditioning must necessarily provide for automatic control of the heating plant. It will be necessary, of course, to provide for different degrees of heating for different parts of the hospital, depending on the particular requirements. For example, the operating rooms will be maintained at a high minimum temperature and a convalescent tuberculosis ward may be maintained considerably below the level for ordinary comfort in other cases.

Humidification—During the winter in the central and eastern parts of the United States the inside humidity will tend to be considerably below what is considered the best hygienic range. Humidification in these regions is important during the cold season. Opinions differ as to the per cent saturation of the air which is the lower level to be allowed. At present there is a tendency to consider a humidity of less than 30 per cent saturation to be too dry. Thirty per cent saturation represents approximately the humidity found in the desert during fairly dry weather. At this level the mucous membranes normally remain moist, but patients with fever may suffer. Dyspnoeic patients in particular may suffer from the drying effect of the large amount of air breathed through the mouth and nasal passages. Some engineers suggest that partial humidification to keep the humidity not less than 20 per cent saturated would be desirable where the expense and technical difficulties prevent a greater measure of humidity control. I believe a humidity as low as 20 per cent may be definitely deleterious to many people when ill.

The principal engineering difficulty in the provision of adequate humidity in winter is the tendency for condensation to take place inside the buildings on cold walls and doors. To avoid such effects satisfactorily it is necessary that the buildings be well insulated and the particular points of ingress and egress of good heat conductors, such as metal pipes, should be well insulated.

There are two main types of humidification which might be considered. In the first, water is added to the circulating air by means of sprays or wet filters in the conduit. This method is decidedly the principle of choice. In the second method, water vapor is added to the air in the rooms by local evaporation. The evaporating pans which are sometimes placed on radiators are very ineffective. The spray or fog type of local atomizer is far more effective but is hardly suitable for permanent installation. In any case, it is desirable, of course, that the water used for humidification in a hospital should be at least as good bacteriologically as the drinking water supply.

Refrigeration—There is a tendency to consider that air conditioning means cooling of the air and that if the air is cooled it is "conditioned." This is not in accordance with definitions of the engineers but we must recognize that much of the recent interest in the subject is focussed in the maintenance of comfortable inside temperatures during hot weather. It must be agreed that extreme hot weather, such as is not uncommon in the middle west, is a serious burden to impose upon a patient who is already ill. This is particularly true of old and debilitated people. Moreover, an appreciable number of cases of heat stroke, collapse, exhaustion, etc., may be admitted to the hospital in the course of the summer. Most of these cases would be much benefited if a reduced temperature of the air could be maintained.

Cooling has a number of difficulties which prevent its more widespread installation. An adequate cooling system may be as expensive to install and operate as a heating system. It is necessary, if a cooling system is to be used, that the building, or part of the building to be controlled, be kept "sealed," which imposes an additional load on the ordinary air circulation system. There has been much discussion about the deleterious effects of artificial cooling in buildings, but it is generally agreed that where the installation of cooling equipment has been followed by increased illness, colds, etc., the mistake was made of attempting to regulate the inside temperature with little regard to the outside temperature. A cooling system which will maintain inside temperature 10 or even 5 degrees below the outside temperature would seem to be adequate for almost all conditions. This means that the cooling system installed need not be of such large capacity as thought at first, and its cost of operation would be proportionately less. In the northern states, such as Minnesota, artesian wells provide a cheap means of cooling by circulation of cold water.

Dehumidification—In the central and eastern parts of the United States high humidity with resultant discomfort is common during much of the summer. Dehumidification generally may be provided at considerably less cost than refrigeration and may answer the requirements for rela-

tive comfort. To be effective a dehumidification system will require that the building be kept closed or maintained at a sufficiently high pressure so that ingress of outside, untreated air is largely prevented.

III What Good Can Air Conditioning Do?

In general it might be said that air conditioning would provide the optimum physical environment for the operation of the patient's restorative powers. It is unnecessary to deal with its benefits in allergies to dust-born proteins. Likewise, we can be sure that the conditions peculiar to abnormal temperature, such as heat exhaustion, heat stroke, etc., will be prevented and recovery from these conditions will be aided by air conditioning.

Operating rooms—Air conditioning has been advocated for operating rooms for several reasons:

1 The inefficiency of the anesthetized patient's heat regulating mechanism renders them peculiarly susceptible to the adverse effects of abnormally high or low temperature.

2 It is important to insure that the surgeon and his staff operate under conditions for maximum comfort.

3 The danger of anesthetic explosion is much reduced if the humidity is maintained above 30 per cent. With a humidity of 50 to 70 per cent saturation the danger of anesthetic explosions through static electrical discharge is almost at the vanishing point.

4 The air-conditioned operating room is supplied with filtered air which should be renewed completely 10 to 15 times an hour. The danger of air-born infections is reduced thereby.

Post-operative recovery rooms—It may be more important, from the standpoint of the patient, to provide air conditioning in post-operative recovery rooms than in the operating room itself. The disturbance to the patient's heat regulating mechanism is greatest during the full course of the anesthesia, but the patient is only in the operating room perhaps two hours and his temperature regulating mechanism may be disturbed for many hours thereafter. It has been reported that post-operative pneumonia is considerably rarer in patients who are allowed to recover from operations in air conditioned rooms even if the operating room is not air conditioned.

Infant mortality is reduced in air conditioned rooms—Some of the statistics which are available undoubtedly give an incorrect picture. For example, in the Infants Hospital, Boston, Massachusetts, it is reported that an infant mortality of 14.5 per cent prevailed in rooms maintained at 25 to 49 per cent saturation. During the same period the infant mortality was only 0.7 per cent in the rooms maintained with 50 to 75 per cent relative humidity. Unquestionably there must have occurred some selection of the infants, probably with regard to the economic status of the parents. In any case, however, air conditioning seems to be highly advantageous for infants.

Rheumatism and rheumatic fever—Rheumatism and rheumatic fever are notoriously affected by climatic conditions. It is well known that these diseases are most common where there is a damp, changeable climate. One of the most important features in therapy for rheumatic fever is the maintenance of warm, dry climatic conditions. Reports are now available to show that air conditioning is frequently able to forestall recurrent attacks, and thereby reduce greatly the incidence of valvular lesions.

Debilitated patients—Debilitated patients suffering from chronic diseases are frequently near the limit of their capacity to maintain adequate circulation. A patient with heart failure, high blood pressure, kidney disease, etc., may simply be unable to meet the added load placed by extreme heat or cold on the heart and circulation.

It should be remembered that the natural regulation of body temperature in the face of changing air temperature is by adjustment of the amount and distribution of the blood circulation. To call into operation these regulatory adjustments may be of serious consequence to the patient who is barely able to meet the circulatory requirements of optimum conditions.

IV What Good Can Air Conditioning Do in Your Hospital?

It is necessary to consider the individual hospital, its natural climatic conditions and the type and character of its patients in order to assess the possible benefit of air conditioning in that hospital. Obviously, hospitals in regions naturally exposed to highly variable climatic conditions should be most seriously studied with regard to the installation of air conditioning. One cannot doubt that the climate of Minnesota is such as to afford many benefits by air conditioning. Summer cooling and dehumidification are probably less important than winter humidification in this region. Of course, in this region, adequate winter heating is supplied everywhere. A hospital serving a large number of allergic patients has an ob-

vious need for air filtration. It may be pointed out that the diagnosis of the nature of the allergy is very greatly aided by maintenance of the patient in a room supplied with filtered and washed air.

Maternity hospitals would seem to have a serious need, in this region, for the provision of adequately humidified air in the winter time.

A hospital doing a large amount of surgery should consider the maintenance of high humidity in the winter time and some means of ameliorating the effects of occasional periods of very hot weather in the summer. It must be stated again that any patient whose circulation threatens to become inadequate should not, if possible, be exposed to the burden of maintaining a high circulation, as is necessary at temperatures over 90° F.

Finally, it is necessary to remember again that in speaking of the "good" which air conditioning may do in your hospital, one must consider more than the patient's welfare. In realistic terms you must decide what is the possible "good" to your hospital as judged by the prestige of the institution and its popularity with patients.

Finally, an air-conditioning installation which may be good in all the foregoing effects may be ruinous to the hospital if economically unsound.

V What Kind of Air Conditioning, If Any, Is Desirable for Your Hospital?

The kind of air conditioning desirable for your hospital must be judged on the basis of the various points already mentioned. Again the primary question is as to the extent of air conditioning which may be installed. Humidity control is the first (after adequate heat control has been provided). In any case, a circulating air system must be provided. It is probable that in the very near future every hospital which pretends to modernity must provide circulating air with controlled humidity.

The particular installation which would be best for you can only be decided in consultation with air conditioning engineers. The activities of the American Society of Heating and Ventilation Engineers has made sure that there are available in almost every community experts whose opinion may be accepted as technically sound.

VI How Much Will It Cost to Install and Operate?

The cost of installation and operation of air conditioning depends, of course, on the building, the present installation for air circulation, the outside climate, and the degree of air conditioning desired. Some figures for the Minneapolis region for complete air conditioning may be useful:

A 20-bed hospital, completely air conditioned, including all service rooms, provided 13 tons of cooling. The total cost of installation was $6,300.00, which works out at about $300.00 a bed.

A 100-bed hospital was air conditioned. The top floor of its five stories contained operating rooms and other service rooms; the fourth floor was mainly given over to nursery, delivery rooms, and other service rooms; the second and third floors were devoted to patients; the first floor contained administration quarters. The total cost was $25,000.00. This provided 85 tons of cooling, and the cost per bed was $250.00.

Individual sealed rooms cost approximately $600.00 per room for the installation of complete air conditioning.

The operating costs for these installations varies according to the amount of summer cooling provided. To amortize the investment, to cover operation, and to provide for deterioration an appreciable increase in the income per bed is necessary. This is not very great, however. With 80 per cent occupancy of the hospital an increase of 50 cents per day in the charge per bed might be ample, unless it is felt imperative to recover quickly the capital outlay for the installation.

VII Is It Desirable and Economically Feasible for You to Install Air Conditioning?

The answer to this question should emerge from consideration of the material I have discussed so far. The only additional questions of importance are whether you can finance the initial outlay and whether your patients can bear the necessary increase in rate.

I have stressed what seem to me to be the practical aspects of air conditioning in hospitals. On the one hand you may desire more information as to the engineering principles involved, and on the other wish to be more fully informed about the physiological effects of air conditioning. However, I think it will be agreed that an analysis of the problem in terms of the realities of your hospital is the prime requisite. I hope I have at least indicated the way in which this may be done.

Addendum

OPTIMUM CONDITIONS

Research to find optimum conditions for the patients' welfare and for patients of different types and with different diseases is, as yet, inadequate,

but some recommendations are possible. The following figures should be taken as suggestions only.

Operating room: Temperature not less than 78° nor more than 90°. Humidity, between 50 and 75 per cent. Circulation at least 10 to 15 times complete change per hour.

Nursery: Not less than 75°; nor more than 95°, except for premature infants, when a temperature up to 98° may be desirable. Relative humidity, between 50 and 75 per cent. Circulation rate, between 15 and 25 complete air changes per hour.

Allergic patients: Sealed rooms with double or triple filtration of washed air.

Rheumatism and rheumatic fever: Temperature same as the operating room, humidity 30 to 50 per cent saturation.

An approximation to the conditions specified here is better than no control at all. In any case every effort should be made to prevent re-circulation of air in the hospital, that is, new air from outside should be brought in to provide a change of air in the rooms.

They Say Corporations Are Heartless, Soulless and Mercenary

"Having recently had occasion to make emergency use of a Drinker respirator for an adult patient, we contacted the local Public Service Co. as well as the Commonwealth Edison Co., knowing that several years ago the Insull interests had provided several of these units for resuscitation of personnel and others in various sections of metropolitan Chicago. We were referred to the medical department of the Chicago Rapid Transit Lines who promptly gave consent and had the unit delivered to our door in the elapsed time of forty minutes from the downtown district, a distance of ten miles.

This case happened to be most unusual. The patient, a middle-aged woman, gave a history of having had infantile paralysis five years previous with respiratory failure and for which she was placed in a respirator in another hospital. She came at this time for surgical treatment of a gynecological condition, and during the course of the anesthetic developed a recurrence of the respiratory symptoms. The operation was completed and patient was kept alive by artificial respiration until the Respirator unit came to hand. Patient immediately responded and after forty-eight hours was taken out, but use was made intermittently for a period of ten days. Patient finally made a complete recovery and left the hospital last week.

We have two Drinker units for infant care, but had never been confronted with the acute necessity for this equipment for adult use. It might be of interest to hospitals to know, that patients having had poliomyelitis are a possibility for recurrence of respiratory failure under anesthesia, even though administered several years after having been afflicted. Also, it is with a sincere feeling of appreciation we call attention to the life preserving service and fine cooperation extended by the medical department of these corporations —no charge being involved to either hospital or patient other than transportation.

Needless to say, as a hospital, we shall be ready for any future occasion of this type by acquisition of this life preserving equipment."

C. C. Gibson Appointed Superintendent of Regina General Hospital

The Board of Governors of the Regina General Hospital, Regina, Sask., Canada, has appointed C. C. Gibson as superintendent to succeed the late Dr. H. H. Mitchell.

Mr. Gibson has had nine years' experience in hospital administrative work. He started with the Regina General Hospital in 1930, and was one of the two assistant superintendents prior to his appointment.

Mr. Gibson is a member of the American College of Hospital Administrators, a long time member of the American Hospital Association, and alumnus of the Institute for Hospital Administrators, conducted each year, under the auspices of the American Hospital Association and other organizations, at the University of Chicago.

A New Catholic Hospital for Philadelphia

The Sisters of the Holy Family of Nazareth will build a $500,000 hospital in the Northeast section of Philadelphia, and will open it at the end of this year.

The institution will be eight stories high, have a capacity of 260 beds, and will be called the Nazareth Hospital.

The plans were drawn by Frank V. Nickels, architect.

Legal Decisions of Interest to Hospitals

NOTES upon court decisions which affect hospitals, or where the hospital was a party to the litigation.

● **Copies of all issues of the magazine containing "Legal Decisions of Interest to Hospitals" should be carefully filed for future reference. The series of articles when completed will contain citations of all the legal cases for each state, as well as the court decisions in the Federal and Canadian Courts. This column will discuss each new case as it is reported.**

Recent Cases

Proceedings of Suit to Recover Expenses of Hospitalization Under New York Lien Law of 1936

Goldwater, Commissioner of Hospitals of New York v. Mendelson, et al., 8 *N.Y.S.* 2*d* 627

Plaintiff sued to recover from defendants expenses of hospitalization which the Fordham Hospital rendered to an infant who had been injured by reason of the negligence of the defendant Mendelson. Defendant's insurer was joined in the suit. The proceeding was brought under the *New York Lien Law of* 1936.

While a hospital, under the New York law, is supposed to have a lien for its services in cases of this kind, it in fact has nothing more than a right of action in contract for services rendered. Of this right the court said:

> " . . . I think that the plaintiff's cause of action, although it is dubbed 'an enforcement of the lien' is merely an action to recover an involuntary debt, which the statute has created in favor of the plaintiff."

The court continued, explaining the effect of this law:

> "On the facts here, the statute has thus fastened a naked liability upon both of these defendants to pay to the plaintiff his charges for caring for the injured infant. No equities are involved here, nor are any equitable maxims called for. No funds are sought to be reached in the hands of third persons, nor are any trusts created by operation of law. Furthermore, the insolvency of the plaintiff's creditor is immaterial here, and no property is to be or can be impounded to apply on account of the principal's debt. The statute simply makes both defendants unconditionally liable to this plaintiff for a period of one year to the extent of the moneys paid by them to the injured infant or his guardian ad litem, in settlement of his claim, less the amount of any other liens or claims superior to the plaintiff's. And it finally provides that plaintiff's lien is to be enforced by 'a suit at law' against these defendants.
>
> "Although the legislature has described the remedy thus afforded the plaintiff 'an enforcement of its lien,' still it has created nothing more than an action at law to recover on 'an obligation to pay money imposed by a statute.'
>
> "The suit at law authorized by the statute is one on an implied contract or quasi contract."

It was determined that, since plaintiff had served notices of his lien upon defendants, and inasmuch as defendants had paid the claim of the injured part with knowledge of plaintiff's claim for services, plaintiff should recover from the defendants.

Judgment for Plaintiff Affirmed in Suit to Recover Cost of Hospital Service from Employer of Patient

Andrew v. Becker, 282 *N. W.* 609, (*Wis.*)

Plaintiff, a physician, conducted a hospital in which he rendered medical services and hospitalization to an injured employee of the defendant. He sued the employer to recover the reasonable value of his services upon the ground that the employer had requested him to render medical services to his employee. There was evidence that defendant had issued a check wherein the plaintiff was named as payee, and that defendant had been billed by the plaintiff. A judgment for the plaintiff was affirmed.

The court reviewed the law applicable to these cases, saying:

> "In seeking a reversal of the judgment the defendant contends that in the absence of an express contract he cannot be held liable for medical services rendered at his request by the plaintiff to Morris to whom the defendant was not legally bound to furnish such services. It is true that the general rule is that the law does not raise an implied promise on the part of a person who requests a physician to render services to another, unless the relation of such person to the patient is such as

puts him under a legal obligation to provide medical attention for the patient. . . . However, there is an exception to that general rule, and it does not control if there is such proof of circumstances, including acts and conduct of the person who calls the physician, as establishes an intention on the part of that person to pay for the services."

This case clearly came within the exception noted, for defendant had indicated by his conduct that plaintiff should look to him for payment. Thus, there arose an implied, if not an actual, promise on the part of defendant to pay the reasonable worth of plaintiff's services.

Liability of Hospital for Malpractice of Physician Selected by Defendant

Roewekamp v. New York Post Graduate Medical School and Hospital, 4 *N.Y.S.* 2*d* 751

This suit was begun by plaintiff to recover damages for personal injuries suffered as the result of malpractice on the part of a physician selected by defendant to remove her tonsils. The complaint was dismissed on the ground that it had not been filed within two years next succeeding the injury. This judgment was reversed on the ground that the statute of limitations applicable to malpractice (2 years) did not apply, that the three year statute applied inasmuch as the action was one against the hospital, based upon its alleged negligence in selecting the physician in question.

It was said by the court:

"In our opinion the act which is the basis of this action is not the malpractice of the doctor, but defendant's negligence in selecting him when it knew or should have known that he was not qualified to perform the operation. That is the charge made against the hospital both by the allegations of the complaint and by the terms of the stipulation entered into between the parties. Defendant may be held liable only for its negligence in selecting the doctor, not for the latter's negligence or malpractice in performing the operation. . . . In other words, a charitable institution which makes a doctor available for the patient's use is not liable for malpractice. It is in no sense an employer or principal. Hence it cannot be held to answer for the doctor's negligence or malpractice. It may be held liable only for its negligence in selecting doctors who are incompetent and unfit to perform the work assigned to them. There is a clear factual and legal distinction between a doctor's liability for malpractice and a hospital's liability for its negligence."

Texas

Liability of Charitable Hospital for Injury of Employee

Armendarez v. Hotel Dieu, 145 *S. W.* 1030

This was an action by an employee of a charitable hospital to recover damages for personal injuries allegedly caused by defendant hospital's negligence. There was a verdict directed in favor of defendant. This action of the trial court was reversed upon this appeal, and the case was remanded for a new trial.

The court, after commenting upon testimony to show that defendant was a charitable institution, turned to the question whether it would be liable for the injury suffered by plaintiff in operating a mangle while in the employ of defendant. It was said:

"The question we have to decide is whether or not the law of master and servant, as it prevails in this state, is to be applied to the defendant, in view of its character as a charitable institution. The defendant is a creature of the state, which has permitted it to incorporate for the purpose desired by it under a statute which vested it with capacity to sue and be sued. An object of the incorporation was to carry on a business in order that the institution might obtain funds, to enable it at the same time to accomplish its charitable work. In order to conduct its business it naturally was proper and necessary for it to have employees, and to thus assume the relation of master and servant, which it did by employing this plaintiff. The law of master and servant, involving the duties it imposes on the master and his liability for injuries resulting from the nonobservance of such duties, permeates and reaches every situation in the affairs of men in which that relation is assumed. This defendant, it appears from the evidence, conducted its affairs for the combined purposes of revenue and charity; the former being, in the religious aims of its members, subordinated to the latter as the ultimate object. But independently of this, had this corporation derived no revenues from its operations, and the funds which enabled it to carry on its benefactions were derived not from its beneficiaries, but from endowments or contributions, it would not in our opinion make a particle of difference in its attitude with reference to its legal duties and liabilities to persons in its

service as employees. It was an incorporated body chartered by its own volition, endowed with power to employ servants, and with the capacity to sue and be sued. It was not in any sense an agency of the state, nor has the legislature seen fit to extend to such corporations exemptions from the well-known duties and liabilities imposed by the general law governing master and servant. This being so, defendant would be liable for injury sustained by its employee due to the negligence, if any, of itself, its managing officers, or agents, or vice principals, which is the case presented here . . .

"We regard as equally without merit, the contention that the property of this defendant is exempt from execution by reason of its character; and that, therefore, recovery against it on this petition would be of no effect."

Hotel Dieu v. Armendarez, 167 *S. W.* 181

After having been remanded, this case went to trial and resulted in a judgment in favor of the plaintiff, which was affirmed on this appeal, the court saying:

"In any case in which, for any reason, the master owes his servant the duty of explaining and giving instructions regarding dangers to which his work normally exposes him, that duty is not discharged by delegating its performance to an agent. Such duty rests primarily and absolutely upon the master, and is nondelegable."

Court Recognizes the Exception to Rule that Charitable Hospitals Are Not to be Held Liable for Negligent Act of Employee

St. Paul's Sanitarium v. Williamson, 164 *S. W.* 36

The suit was brought in this instance to recover damages for personal injuries suffered by a patient when she was burned by a hot water bottle. Defendant was a hospital corporation not operated for profit. A judgment in favor of the plaintiff was affirmed.

The court considered carefully the law from other states and then said:

"It will be seen from the cases cited from this state that the rule here is that such institutions, with respect to patients within their walls or under their care, whether the patient be one on charity or one who pays, are liable for the negligence of their physicians, nurses and servants only when it appears that ordinary care has not been exercised in their selection and retention; and that, with respect to injuries inflicted upon third persons and employees by the negligence of their managers, agents, and servants in the conduct of the institution, they come entirely within the rule of respondent superior . . .

"According to the testimony of all the witnesses who possessed any knowledge on the subject, while it was necessary and usual to place the bottle of hot water in the bed, it was attended with more or less possible injury to the patient, if managed improperly. From which it follows that it was the duty of those directing the placing of the bottle to have selected no person to perform that task not competent to anticipate injury to the patient by reason of the water being too hot. Pauline Nash, selected to perform the duty, was not only not competent but wholly inexperienced, and we think her selection by Sister De Sales, a member of the corporation, to perform the task, is alone sufficient to sustain the finding of the jury."

Texas, then recognizes the exception to the general rule that charitable hospitals are not to be held liable for the negligent acts of their employees, which exception is: that if it can be shown that the agents of the hospital were negligent in hiring, or in retaining the employee in question, then the hospital will be liable if injury follows from some negligent act of the person in question. The courts of a few states recognize this exception, but in very few instances has liability been imposed, based upon that exception. The principal reason for the scarcity of such cases is the fact that burden of proof is difficult for the plaintiff, especially where a trained nurse is involved. The testimony in these cases is usually that the bottle was examined before being placed in the bed, thus rebutting the inference that the nurse was negligent.

INSTITUTE FOR HOSPITAL ADMINISTRATORS
Conducted by The American Hospital Association
UNIVERSITY OF CHICAGO, SEPTEMBER 5-16, 1939

American College of Hospital Administrators

THE American College of Hospital Administrators, at the recent meeting of the Credentials Committee, accepted into the College four Honorary Fellows, eight advancements to Fellowship, eight advancements to Membership, twenty-four Fellows, fifty Members, and thirty-one Junior Members. These persons will be formally inducted into the College at the Sixth Convocation to be held in Toronto.

Honorary Fellowship

W. Alter, M.D., Buchschlag, Hessen, Germany

Mrs. L. de G. Beaubien, Hospital St. Justine, Montreal, Quebec, Canada

Rev. Joseph S. O'Connell, Catholic Charities, New York City

Rene Sand, Ministry of Health, Phalenes, Brussels, Belgium

Advancements to Fellowship

Sister Mary Alberta, Mercy Hospital, Council Bluffs, Iowa

Sister Chrysostom, Providence Infirmary, Mobile, Alabama

Sister Mary Gonzalva, St. Mary's Hospital, Grand Rapids, Michigan

Asahel J. Hockett, M.D., Touro Infirmary, New Orleans, Louisiana.

Adeline M. Hughes, Jewish Hospital, Louisville Kentucky

Sister Mary Ligouri (Thibideau), Mercy Hospital and Sanitarium, Manistee, Michigan

Charlotte Pfeiffer, Stuart Circle Hospital, Richmond, Virginia

Nathan Smith, M.D., Morrisania City Hospital, New York City

Advancements to Membership

Welby E. Abrams, Carle Memorial Hospital, Urbana, Illinois

V. R. Bottomley, Tennessee Hospital Association, Greenville, Tennessee

O. K. Fike, Grace Hospital, Richmond, Virginia

Marion C. Fussell, Winthrop Community Hospital, Winthrop, Massachusetts

Sister Mary Immaculata, Leila Y. Post Montgomery Hospital, Battle Creek, Michigan

Millie E. Ploeger, Deaconess Hospital, Freeport, Illinois

Sister Roberta, Hotel Dieu, New Orleans, Louisiana

Mary K. West, Methodist Hospital of Southern California, Los Angeles, California

Elections to Fellowship

Sister M. Albina (Feist), Supt., St. Elizabeth Hospital, Lafayette, Indiana

Sister Mary Alice, Supt., St. Elizabeth's Hospital, Yakima, Washington

E. A. Baber, M.D., Supt., Longview State Hospital, Cincinnati, Ohio

Norman C. Baker, M.D., Ass't, Massachusetts General Hospital, Boston, Massachusetts

Sister Camilla (Kurre), Supt., St. Mary's Hospital, Hoboken, New Jersey

Sister M. Edigna (Birk), Admstr., St. Alexis Hospital, Cleveland, Ohio

Ruth I. Humphrys, Supt., Framingham Union Hospital, Framingham, Massachusetts

Sister M. Ignatius, Supt., St. Joseph's Hospital, Glace Bay, Nova Scotia, Canada

Sister M. Immaculata, Superior, St. Martha's Hospital, Antigonish, Nova Scotia, Canada

Charles J. Koerth, M.D., Supt., Woodmen of the World Memorial Hospital, San Antonio, Texas

Arthur T. Laird, M.D., Supt., Nopeming Sanatorium, Nopeming, Minnesota

Felix G. Lamela, Admstr., University Hospital, San Juan, Puerto Rico

Sister Louise (May), Admstr., Saint Agnes Hospital, Baltimore, Maryland

Arthur Moore, M.D., Supt., Elizabeth A. Horton Memorial Hospital, Middletown, New York

Leo. R. Robbins, Supt., Hahnemann Hospital, Scranton, Pennsylvania

P. Godfrey Savage, Supt., Niagara Falls Memorial Hospital, Niagara Falls, New York

Clara D. Schafer, Supt., South Chicago Community Hospital, Chicago, Illinois

Leonard Shaw,* American Hospital Association, Chicago, Illinois

Walter S. Stevens, M.D., U. S. Indian Hospitals, Oklahoma City, Oklahoma

Myral M. Sutherland, Supt., Mary McClellan Hospital, Cambridge, New York

Dora Tolle, M.D., Med. Supt., Willard Parker Hospital, New York City

Sister Ursula (Fenton), Providence Hospital, Waco, Texas

Harry H. Warfield, Supt., St. John's Riverside Hospital, Yonkers, New York

G. Walter Zulauf, M.D., Supt., Allegheny General Hospital, Pittsburgh, Pennsylvania

Elections to Membership

Burton A. Adams, Ass't Supt., Fairmont Hospital, San Leandro, California

*Deceased

Sister M. Aloysius (McGuire), Supt., St. Joseph Mercy Hospital, Centerville, Iowa

Sister Anna (Hastings), Supt., St. Vincent's Hospital, Bridgeport, Connecticut

Sister Antonia (O'Donoghue), St. Paul's Hospital, Dallas, Texas

Harold S. Barnes, Supt., Latter Day Saints Hospital, Salt Lake City, Utah

Leonard B. Benson, Admstr., Bethesda Hospital, St. Paul, Minnesota

Ernest R. Carney, Admstr., Parkside Hospital, Detroit, Michigan

Edmund F. Collins, M.D., Dir., Grace Hospital, Detroit, Michigan

Ralf Couch, Supt., U. of Oregon Medical School Hospital, Portland, Oregon

Helen F. Dannahe, Supt., F. F. Thompson Hospital, Canandaiqua, New York

Max DeKaye, Supt., Beth-El Hospital, Brooklyn, New York

Mathilda J. Dennison, Supt., Shriners' Hospital, Minneapolis, Minnesota

Minerva T. Eisenstadt, Ass't Supt., Beth-El Hospital, Brooklyn, New York

Sister Emile, Ass't Supt., St. Mary's Hospital, Milwaukee, Wisconsin

Sister M. Esther (Melloy), Admstr., St. Joseph Mercy Hospital, Sioux City, Iowa

George W. Eutsler, Director, Holston Valley Community Hospital, Kingsport, Tennessee

Olin L. Evans, Supt., Homeopathic Hospital, Reading, Pennsylvania

Sister Mary Gertrude, Supt., St. Mary's Hospital, Philadelphia, Pennsylvania

Jacob Goodfriend, Ass't Dir., Montefiore Hospital, New York City

Leonard P. Goudy, Supt., Saskatoon City Hospital, Saskatoon, Sask., Canada

Roxanna Gray, Supt., Canonsburg General Hospital, Canonsburg, Pensylvania

Nels E. Hanshus, Mgr., Luther Hospital, Eau Claire, Wisconsin

Iva L. Hartman, Supt., Pinehurst Sanatorium, Janesville, Wisconsin

Sister Helen (McMahon), Ass't Supt., St. Vincent's Hospital, Los Angeles, California

Jessie A. Horn, Supt., Scripps Memorial Hospital, LaJolla, California

Eva E. Janson, Supt., Children's Hospital, Columbus, Ohio

Everett W. Jones, Dir., Albany Hospital, Albany, New York

Alexander W. Kruger, M.D., Kings County Hospital, Brooklyn, New York

Ada I. Leonard, Supt., Middletown Hospital, Middletown, Ohio

Francis C. Leupold, Supt., Jamaica Hospital, Jamaica, New York

A. M. Lopez, Supt., Warren General Hospital, Warren, Pennsylvania

Sister Mary Lourdes, Supt., St. Joseph Mercy Hospital, Mason City, Iowa

Janet R. McLellan, Supt., King's Daughters Hospital, Temple, Texas

Bertha W. Mears, Supt., Holston Valley Community Hospital, Kingsport, Tennessee

Herbert N. Morford, Supt., Prospect Heights Hospital, Brooklyn, New York

J. Carl Painter, M.D., Supt., Dubuque County Hospital, Dubuque, Iowa

John P. Ruppe, M.D., Supt., New York Eye and Ear Infirmary, New York City

Albert C. Seawell, Ass't Supt., Baylor University Hospital, Dallas, Texas

Clara Sinclair, Supt., Saratoga Hospital, Saratoga, Springs, New York

Myrtle B. Skoog, Supt., Immanuel Hospital, Mankato, Minnesota

Elizabeth L. Sloo, Supt., Protestant Hospital, Nashville, Tennessee

Harry W. Smith, Supt., City Hospital, Columbus, Georgia

Glenn R. Studebaker, Ass't Dir., Albany Hospital, Albany, New York

Mrs. Willie M. Vaughan, Supt., Goldsboro Hospital, Goldsboro, North Carolina

Sister M. Vera (Hau), Supt., St. Margaret Hospital, Hammond, Indiana

Mabel G. Wilson, Supt., Butler County Hospital, Butler, Pennsylvania

William L. Wilson, Jr., Strong Memorial Hospital, Rochester, New York

Irmela M. Witke, Supt., Lutheran Hospital, Sioux City, Iowa

Robert C. Woodard, Supt., James M. Jackson Memorial Hospital, Miami, Florida

Mrs. Elizabeth Woolson, Supt., Axtell Christian Hospital, Newton, Kansas

Elections to Junior Membership

Harriet V. Ailstock, Supt., Parrish Memorial Hospital, Portsmouth, Virginia

Sister Alan (Rutherford), Ass't, St. Alexius Hospital, Bismarck, North Dakota

Sister Mary Alice, Supt., St. Michael's Hospital, Grand Forks, North Dakota

Sister Mary Alice, Ass't Supt., St. Margaret's Hospital, Montgomery, Alabama

Sister M. Bernadette (Trettel), Supt., St. Gabriel's Hospital, Little Falls, Minnesota

Florence Bloomer, Supt., Geneva General Hospital, Geneva, New York

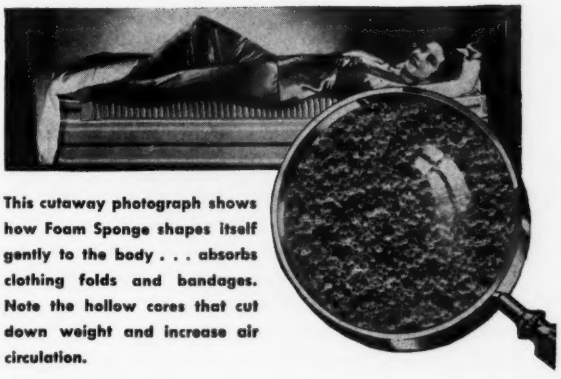
Leon Bondi, Supt., Galesburg Cottage Hospital, Galesburg, Illinois

Paul L. Burroughs, Ass't Admstr., Rochester General Hospital, Rochester, New York

U.S. ROYAL *Foam Sponge*

HOSPITAL MATTRESSES

TRADE-MARK



This cutaway photograph shows how Foam Sponge shapes itself gently to the body . . . absorbs clothing folds and bandages. Note the hollow cores that cut down weight and increase air circulation.

MORE COMFORT FOR PATIENTS: A marvelous material, softer than flesh, "flows" with every body contour, eliminates the major cause of bed sores.

LESS WORK FOR NURSES: Half usual weight. Easy to roll and carry. Self-airing. Needs no turning.

LOWER UPKEEP — LONGER LIFE: Made without springs to sag or padding to pack down, Foam Sponge mattresses never need rebuilding. Hospitals report no sign of wear after six years.

HYGIENIC ADVANTAGES: Inimical to vermin and germ life. No tufts or buttons to catch dust. Entirely porous: easily sterilized through and through by approved hospital methods. Unharmed by steam at 220° F.

WHAT IS FOAM SPONGE? Pure milk of the rubber tree (from our plantations in Sumatra), whipped into a foam, then baked in special molds to give it permanent shape. Buoyed by millions of interconnecting air cells, Foam Sponge products are light weight, yet hold their shape through long life.

United States Rubber Company
Mishawaka, Indiana

RUBBER WILL SERVE YOU BETTER

James R. Clark, Director, Southside Hospital, Bay Shore, Long Island, New York

Sister M. Claudia (McFadden), Ass't, All Souls Hospital, Morristown, New Jersey

Frances C. Eckman, Supt., Miller Memorial Hospital, Duluth, Minnesota

Sister M. Grace (Hayes), Ass't Supt., St. Mary's Hospital, Grand Rapids, Michigan

Elizabeth Harding, Supt., Lakewood Hospital, Lakewood, Ohio

Mrs. W. Hardy, Ass't Supt., Hardy Sanitarium, Ardmore, Oklahoma

Gertrude T. Haynes, Spartanburg General Hospital, Spartanburg, South Carolina

Genevieve A. Hilger, Supt., Decorah Hospital, Decorah, Iowa

Robert T. Johnson, Supt., Ideal Hospital, Endicott, New York

Sister Laurentia, Supt., St. Michael's Hospital, Newark, New Jersey

John Law, M.D., Ass't Dir., Grace Hospital, Detroit, Michigan

Sister Mary Marguerite, Supt., Saint Vincent Charity Hospital, Cleveland, Ohio

Jack Masur, M.D., Montefiore Hospital, New York City

Evelyn A. McGuiness, Act. Supt., Epworth Hospital, South Bend, Indiana

Thomas H. McMillan, Admstr., McMillan Hospital, Charleston, West Virginia

Sister Mary Philippa, Supt., St. Joseph Mercy Hospital, Detroit, Michigan

Albert H. Scheidt, Ass't Admstr., Indiana University Medical Center, Indianapolis, Indiana

William G. Simmons, Hinsdale Sanitarium and Hospital, Hinsdale, Illinois

Graham F. Stephens, Ass't Admstr., Evanston Hospital, Evanston, Illinois

Christine D. Strom, Supt., Lakeview Memorial Hospital, Stillwater, Minnesota

Marjorie Summers, Supt., Las Campanas Hospital, Compton, California

Alma M. Troxell, Supt., Oil City Hospital, Oil City, Pennsylvania

Mae I. Weber, Mission Hospital, Huntington Park, California

The International Hospital Congress

Toronto, September 19-23, 1939

The International Hospital Congress to be held in Toronto next September will be a world convention of hospitals. It opens just preceding the annual convention of the American Hospital Association, the convocation of the College of Hospital Administrators, the convention of the Protestant Hospital Association, and other organizations, national in scope and closely allied to the hospital field.

Among the speakers of international reputation whose names will appear on the programs are: Dr. Rene Sand of Belgium, Sir Donald Menzies, the eminent British authority on hospitals, Captain J. E. Stone of the Birmingham Hospitals Centre, Mr. Cederstrom, architect, Dr. W. Alter and many others. The representation from Latin America will be a large one, with practically every country in Central and South America represented. France, Italy and other countries in Central Europe will be well represented.

Hospital people of the United States and Canada, who are the hosts of the Congress, should welcome our distinguished colleagues from the other countries of the world with a large attendance at the sessions of the Congress.

May His Tribe Increase

The historic French Hospital in New Orleans has served its city faithfully and well for almost 100 years, since 1844. Like other hospitals doing a great deal of charity it has lately experienced hard times, and badly needed painting both inside and outside. The Hon. Robert Maestri, the big-hearted, broad-minded Mayor of New Orleans has ordered this fine old hospital repainted at the city's expense, announcing that the great amount of charity work it has done entitles it to public assistance.

Every hospital should be a safe place for delivery. That is what every woman has a right to expect; the best interests of all concerned demand it. Large or small, the hospital has very positive obligations. It must control and closely supervise its obstetrics, for responsibility for the patients' welfare does not rest entirely with the physician. Nothing need be done to discourage that intimate relationship between patient and physician which is so essential, yet the patient must be protected and the physician supported whether they wish it or not. Facilities must be mobilized for advice and help, and consultation must be easily obtained when indicated. Not only should general practitioners be afforded opportunities to do good work, but they must be made to feel that they are an important part of the obstetrical service in the hospital.—*Charles A. Gordon, M.D., F.A.C.S., Brooklyn, New York.*

M. BURNEICE LARSON, Director

Physicians — Hospital Administrators — Graduate Nurses — Dietitians — Technicians

No matter where you live . . . Seattle, Miami, San Diego, Montreal . . . Chicago . . .

Our Medical Bureau has applications for finer employes from individuals and hospitals in practically every State in the Union, from many points outside, because we are famed for our success in fitting new people into satisfying positions; and, because Chicago is *centrally* located. Air mail and telegraph, photographs and records make distance no barrier.

We will help you find the place you want no matter where you live today, no matter where you ask for location.

Distance is never a barrier. The telephone, the air mail letter, the night letter make Seattle or Miami or San Diego or Montreal . . . *or any place you live* . . . as close to Chicago as though you registered with us from Elgin, Illinois, a scant forty miles away.

No matter *where* you live . . . no matter where you ask *to go* . . . we'll help you find the finer task you want, provided *only* that *you* have integrity, that you have common sense and earnestness, that you have that kind of understanding that gets its work done always better than it need be done . . . and *love* the doing it.

No matter where you live . . . if you are a physician, an administrator, a staff nurse, a dietitian, a laboratory worker, anaesthetist or supervisor . . . or if you *need* finer employes, we ask that you write to us; we are famed for finding just what you want.

The MEDICAL BUREAU

55 E. Washington St.
The Top Floor of the Tower of the Pittsfield Building
CHICAGO, ILLINOIS

Administrative Practices

GEORGE D. SHEATS

IT IS a well known fact that in the commercial world today a product or service is considered as good as the reputation of its makers. The service in a hospital may be judged in the same way. Standards may be set and rules made governing the work done in an institution, but in the final analysis the administrator is the primary factor responsible for the type of work done in his institution.

The administrator is in the key position to instill in the hospital staff their responsibilities to the institution and to the community it serves. It then becomes his duty to transform this responsibility into an actuality. This necessitates, first, that he have the proper staff set up, composed of men who are particularly interested in constructive, scientific work, and that these men have an unbiased opinion where the scientific procedure of the hospital is the primary factor. Such men should be correlated into various committees, such as, laboratory, intern, and surgical, the chairman of each, together with the chief of the staff to compose the staff executive committee. They should keep well informed as to any scientific advancement to the end that they may recommend for the administrator's consideration new procedures that seem practicable for their institution. It then becomes the duty of the administrator to act as intermediary between his staff and his own lay board and make recommendations in such a manner that they will be accepted according to their merit and the institution's ability to purchase.

There is another very important duty of the staff executive committee that should not be minimized, that is the recommending of additional members to the associate or courtesy staff. Such recommendations should be carefully considered as to classification and ability. The administrator must be tactful enough to convince his board that only men of accepted standing, regardless of their ability to produce, should be admitted. Sometimes this requires all the diplomacy and finesse at his command. And, last but not least, it becomes his responsibility to see that at all times his physical equipment is adequate to meet increasing scientific demands and that his personnel is of the highest type.

Presented at the Sectional Meeting of the American College of Surgeons, Nashville, Tennessee, January 18, 1939.

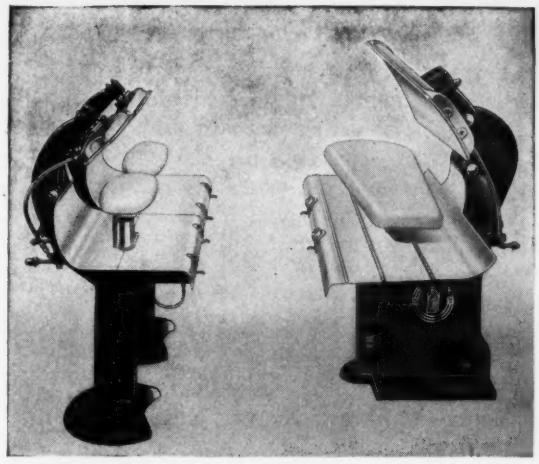
The Author

● George D. Sheats is Administrator of the Baptist Memorial Hospital, Memphis, Tennessee.

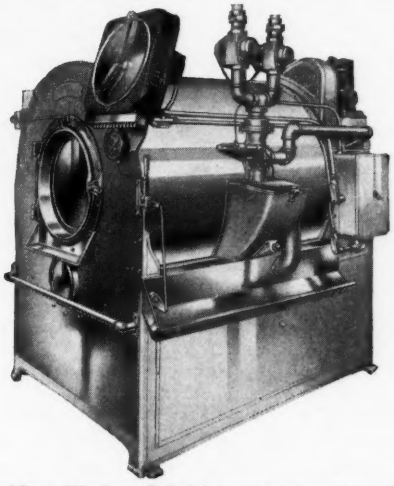
Low Cost Hospital Care versus Rising Cost of Rendering Services

Probably no question has been raised recently in the minds of the public that has received more comment or created more concern than low cost hospital care versus rising cost of rendering service. Almost all of us are painfully aware of the fact that in recent years endowment funds and community fund assistance have been materially on the decline, in fact, almost extinct. This being true and the demand rapidly increasing for the hospitalization of the low income patients, some means of providing additional income other than that derived from actual hospital receipts became apparent for many such institutions. Such was the case with the one I represent. Casting around for some plan that would meet this need it was decided after much reflection to try something entirely new and different, that was the incorporation of offices for staff members and tenants within the hospital building proper. Once the idea was advanced it was enlarged upon until it included not only an office building, but other conveniences such as hotel, drug store, restaurant, etc. From the very beginning this project has been a phenomenal success, so much so, that the demand for additional space became so acute and the waiting list so long that last year it was necessary to erect a five-story addition. This addition was opened last September and is completely filled. There is at present occupying this unit approximately fifty staff members and three dentists.

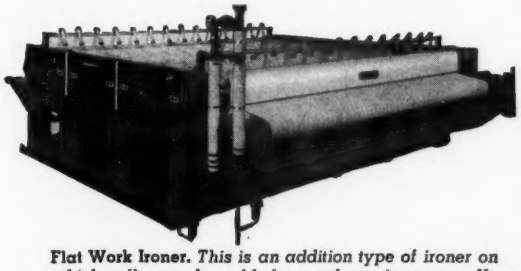
In analyzing the reason for the popularity of this project it is readily seen that in addition to enabling the staff member to save considerable time it has the added advantage of making it possible for him to avail himself of the entire hospital personnel and diagnostic facilities. To the institution such a unit serves as a perpetual endowment and not only means additional patients, but rents derived from tenants and revenue from the various other departments such as drug store, hotel, etc., amounting to slightly over $125,000.00 a year, enables our institution to meet the demand for low cost hospital care in a



Wearing Apparel Finishing Unit *consisting of one model 454 PC for skirts and large areas of uniforms and aprons; and two Pony models 219 PO for finishing yokes, shoulders, collars, caps, etc.*



End-Door Washer. *A Tuf-flex plate glass door shows clearly every phase of the washing cycle, enabling the washman to adjust supplies to wash "load" requirements. It's a precision feature.*



Flat Work Ironer. *This is an addition type of ironer on which rolls can be added as volume increases. No output is too small or large for this precision ironer.*

"Prosperity" PRECISION LAUNDERING *keeps Costs* DOWN . . . *Quality* UP

Now, substitute economical precision methods for the old, costly hit-or-miss laundering. Be able to predict accurately what a definite quantity of laundry work—washed and finished to definite quality standards—will cost you. Then keep the cost there—week after week. Only that way can you keep your budget in line.

Prosperity *Precision Laundering* equipment and methods make accurate control of cost and quality a practical, realizable management goal. That's because Prosperity methods co-ordinate and time the machines to a smoothly-working rhythm, and reduce the human variable by standardized, hence habitual, routines. The ratio of cost to quality will vary somewhat with the equipment used, but good results can be achieved even in laundries not 100% Prosperity equipped.

Mail the coupon today. Let a trained Prosperity field engineer survey your laundry and tell you all about Prosperity *Precision Laundering*—all without cost or obligation to you.

Copyright 1939, G. A. Braun, Inc.

G. A. BRAUN, Inc.
612 N. MICHIGAN AVE.
CHICAGO, ILLINOIS
Midwestern Distributor
OF PROSPERITY EQUIPMENT

G. A. Braun, Inc.
612 N. Michigan Ave.
Chicago, Ill.

Without cost or obligation to me, please have one of your field men call and explain the advantages of precision laundering.

Name.....

Hospital.....

City.....*State*.....

manner that does not create a deficit nor jeopardize the hospital's general fund. When I say that under this scheme wards have been provided for patients as low as $10.00 per week with a 50 per cent discount on all extras, you can readily see its advantages. Such a plan would not be feasible in every institution, but where the geographical location is convenient it is a means toward solving the one important financial problem for the hospital.

Financial Security for Employees

It would seem that in this age of adjustment some means could be provided to assist the hospitals with regard to their pensionable employees. There are no other workers that deserve more consideration than hospital employees, due, necessarily, to the type of work that they perform. However, of the various pension plans that have been advanced few if any have worked satisfactorily. Some institutions throughout the field have been in a financial position by special endowments or otherwise to pension their employees at a retirable age, but the number is still in the minority and bids fair to remain so unless some satisfactory method is adopted. At the present time all types of businesses with the exception of hospitals are being included under the Social Security Act. It seems only reasonable that hospital employees should be included in some way. Some effort has been made with the authorities in Washington to include hospital employees under this Act on the basis of the employee paying the entire amount. However, little progress along this line has been made. I feel that this is eventually going to be the most satisfactory answer to this problem since so few institutions are in a position to assume any responsibility whatsoever with regard to their old age retirement.

Selection of Administrators

The young man of today who chooses to follow the vocation of hospital administration is indeed fortunate in comparison with the young hospital administrator of former years. Those of us who have been in the field for years will not soon forget the means by which we gained knowledge of our profession,—namely, personal contact one with another, reading of hospital periodicals, and the actual experiences which was many times costly. With the progress that has been made in recent years in the training of hospital administrators, boards of trustees should take recognition of the advantages for administrative education offered by the American Hospital Association. With its Institute for employees, already engaged in hospital work, they should encourage the enrollment of those showing promise of development in such courses. They should also realize what is being done by the American College of Hospital Administrators toward adopting standards by which administrators are recognized. With universities now giving courses in hospital administration it is no longer necessary that the hospital executive be drafted from the field of commercial business, untrained and inexperienced.

The opportunity now being offered to men who have completed courses in universities to serve an administrative internship in a hospital under the guidance of a capable administrator cannot be too highly commended as it offers him the same opportunity as the graduate in medicine. It enables him to get the actual experience necessary to command a position in the field.

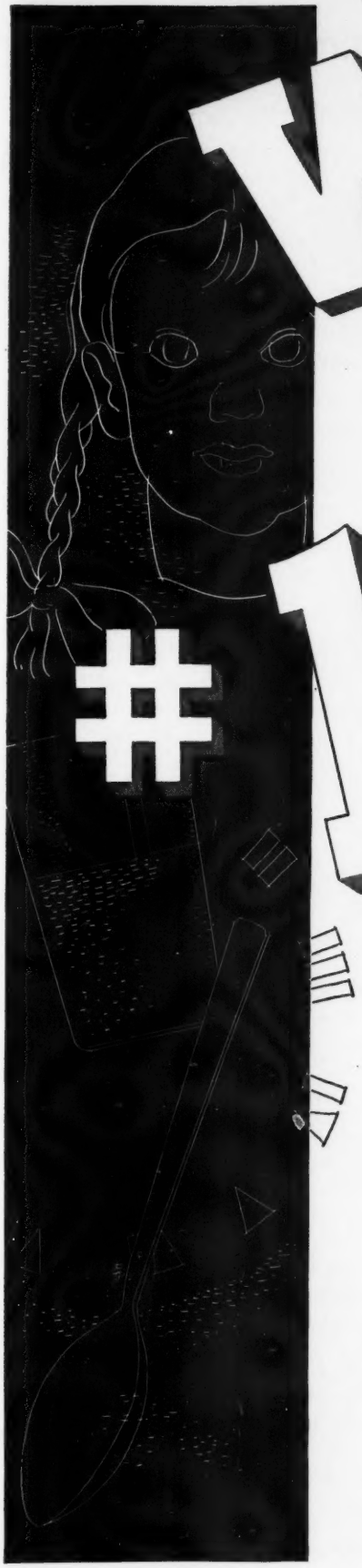
Much has been done, and still much remains to be done by these cooperative agencies to impress upon the minds of the government boards of hospitals that the science of hospital administration is in a new era. And if they realize the seriousness of their obligation to their own institution they will know the selection of a hospital administrator today is quite different from what it was a few years ago, and that they jeopardize not only the institution but the community when they adhere to the old method of drafting administrators rather than the method of voluntary enlistment.

Distilled Water

The production of distilled water of unusual purity becomes largely a matter of using apparatus capable of the highest efficiency.

The necessity for frequent cleaning, the regulation of performance, protection against burnout, automatic water feeding, cooling, the various capacities required in different institutions, have all had thorough study by the American Sterilizer Company of Erie, Pennsylvania.

Realizing the needs existing, and knowing the purposes for which distilled water is used in hospitals, the American Sterilizer engineers have solved the problems in a manner which makes their new catalog supplement, recently issued, of special interest. Illustrations showing details of construction and the descriptions demonstrate the value of their stills in a convincing manner in this catalog.



WHY #1

THE EMULSION...

Petrolagar

FOR CONSTIPATION

Petrolagar is more palatable. Easier to take by patients with aversion to plain oil — may be thinned by dilution.

2. Miscible in aqueous solutions. Mixes with gastro-intestinal contents to form a homogeneous mass.
3. Does not coat intestinal mucosa. Petrolagar is an aqueous suspension of mineral oil — oil in water emulsion.
4. No accumulation of oil in folds of mucosa.
5. Will not coat the feces with oily film.
6. Does not interfere with secretion or absorption.
7. Augments intestinal contents by supplying an unabsorbable fluid.
8. More even distribution and dissemination of oil with gastro-intestinal contents.
9. Assures a more normal fecal consistency.
10. Less likely to leak.
11. Provides comfortable bowel action.
12. Makes possible five types of Petrolagar to select from to meet the special needs of Bowel Management.

Petrolagar -- Liquid petrolatum 65 cc. emulsified with 0.4 Gm. agar in a menstruum to make 100 cc.

Petrolagar

Petrolagar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Ill.

Internships in Hospital Administration

RUSSELL C. NYE

IN 1935 a formal program for the profession of hospital administration was inaugurated at the University of Chicago, in the Graduate School of Business, under the auspices of the Rosenwald Fund. In 1938 the Commonwealth Fund awarded the University a grant to carry on the program.

Physicians, nurses, and laymen holding a Bachelor degree are eligible for application. Selections for the restricted number of admissions are made on a basis of previous relationship with the hospital field, reasons for entering the field, scholastic standing, personality, and ability for organization and leadership.

Didactic Training

The formal professional education of the physicians and nurses is supplemented by basic courses in business administration and management, economics, accounting, statistics, business law, and such related subjects that broaden the scope of and complements their respective professional experiences. The layman, on the other hand, must have his educational background analyzed and in the majority of cases concentrate his formal studies on introductory work in sociology, public welfare administration, physiology, and basic work in business management.

In order to cover the individual needs of each student the curriculum is varied but all take special courses to provide common knowledge to each student and to build a firm foundation. Field studies and weekly seminars give each student an opportunity to have an intensive discussion and study of each department in the hospital and to compare the application of principles in the respective hospitals in which field studies are made.

The Internship

From the evolutionary and experimental trial and error process of qualifying for a hospital administration job, has developed a scholastic training course supplemented by a twelve months, or more, administrative internship in a selected hospital. The administrators of these respective hospitals become the interns' preceptors and from the first to the last month of the internship, it is as individualized as the institution in which it is taken; there is no established routine.

The Author

● **Russell C. Nye is the Asssistant to the Administrator of the Crawford W. Long Memorial Hospital, Atlanta, Georgia.**

While talking shop with several contemporaries who have had this type of training, it was more or less agreed that there are several fundamental points which every internship should incorporate.

First, because we do not have the prestige of tradition, the intern's place in the administrative hierarchy is more quickly established if his work space is permanently assigned in the administration's suite of offices.

Second, the intern brings to the hospital the zeal and desire to make his work a "career job" and the chosen preceptor should not take on an administrative intern and then side track him on one project. Neither should he be just an errand boy, although there should not be anything he is not willing to do.

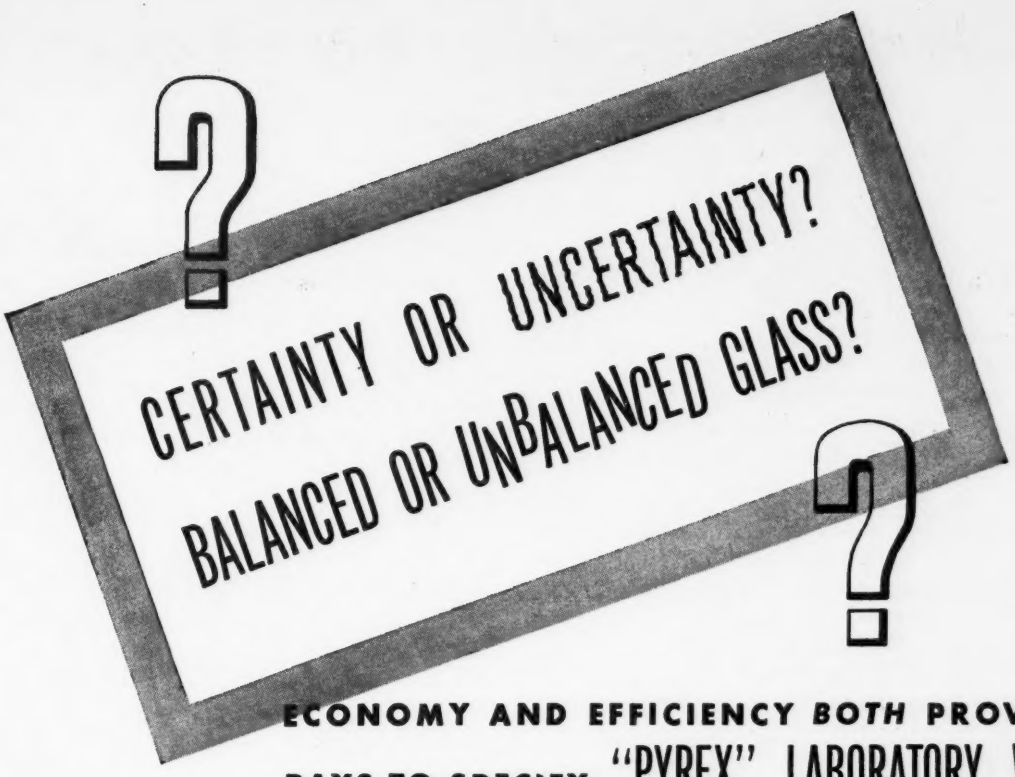
Third, as a composite organization, hospital management requires a familiarity with many complex problems. The internship should have a broad scope and deal with everyday practical problems and duties. This can be accomplished by mapping out a tentative schedule for the year to include routine work and intimate observation of procedures in each department and service of the hospital.

From experience it has been found that the information desk and mail room are good places in which to familiarize one's self with the character of the hospital and the names and relationships of the personnel. The admission department and the business office follow logically and in a month's time the intern can feel a part of the organization.

Supplementing this series of new experiences the intern can be given some routine desk work several hours each day such as reports on departments in which he has worked, compiling statistical reports, keeping census figures, or even do some secretarial work if the set up permits.

It is imperative for the intern to go into each

Presented at the Hospital Conference of the American College of Surgeons, Nashville, Tennessee, January 20, 1939.



ECONOMY AND EFFICIENCY *BOTH* PROVE IT PAYS TO SPECIFY "PYREX" LABORATORY WARE

WITH Balanced Glass you can be certain. Certain that your laboratory ware is mechanically strong, thermally safe, chemically stable. And you can be equally sure that its strength and its stability have been scientifically *balanced.* Each property of Balanced Glass is adjusted to every other property. None has been enhanced at the expense of another. All are combined for maximum value—for all-around use.

It is the "Balance" in Pyrex brand Glass that makes it preferred by all laboratories. It is this "Balance" that makes "Pyrex" Laboratory Ware an economical necessity for many laboratories. "Pyrex" Ware at today's prices is a better "buy" than ever before. Every laboratory can *profitably* standardize on Balanced Glass—can specify "Pyrex" Laboratory Ware, confident of its superiority, certain of its efficiency, *sure of its savings.* Insist on *the* Balanced Glass. Daily use gives daily proof of your good judgment.

"Pyrex" is a registered trade-mark and indicates manufacture by

CORNING means Research in Glass

T.M. REG. PYREX U.S. PAT. OFF.

CORNING GLASS WORKS • CORNING, N. Y.

"PYREX" LABORATORY WARE—MADE OF THE BALANCED GLASS

VISIT THE GLASS CENTER AT THE 1939 NEW YORK WORLD'S FAIR

department with the idea of doing anything he can do if it is only filing cards or pulling medical records. Only by doing as much actual work as possible does one coordinate the complexities of the system and come to perceive and appreciate the difficulties attendant in a job, and to observe personality and physical barriers in the way of complete harmony and cooperation.

Fourth, a very valuable experience to an intern is a weekly conference with the administrator over assigned work reports and problems observed on the job or met in the past. The administrator should use this time to instill ideas and ideals in the intern in accordance with the standards of the hospital.

Toward the latter months of the internship when student and teacher relationships are no longer strange, the administrator, at his discretion, can bring his intern into the current administrative problems and practices of his hospital. Attendance at committee meetings, trustee meetings, conventions, staff meetings, and department conferences not only gives a first hand introduction to the many sided character of management but also reveals to the intern the need of an open mind and spirit of cooperation in coping with problems and people, and the need of being wary in decisions likely to establish a precedent. Likewise it instills in a member of this young movement a sincere desire to be an honest and effective leader in the community and councils of his chosen profession.

It is recognized by all that no good work, no matter how robust its qualities, can bear bad reproduction. So, painstakingly and with deference to each administrator's judgment, the administrative internship has been established as an available process of reproducing hospital leadership.

Conclusions

First, make the internship as much a part of your organization as the medical internship, when your hospital is selected.

Second, remember that the selection of hospital administration as a career was not necessarily made when the student left high school to enter college but after at least four years of maturing thought.

Third, make the internship educational through practical experience instead of merely through observation.

Fourth, personal contact with the intern's preceptor will give him a more vivid memory of the practical application of principles in pursuing the ultimate purpose in his chosen work.

Fifth, we who have passed through our internships know that what shortcomings and defects subsequently appear are not due to our training but to ourselves.

Bibliography

Howard E. Bishop: The Address of the President ACHA. *HOSPITALS*, November, 1937.

Michael M. Davis, Ph.D.: Some Experience in the Education of Administrators. *HOSPITALS*, January, 1938.

Michael M. Davis, Ph.D.: Hospital Administration, a Career. *Rosenwald Fund Publication.*

Articles in *Modern Hospital* and *HOSPITALS* magazines by Dr. Fred Carter and Dr. Goldwater.

Bena M. Henderson

Bena M. Henderson, R.N., a pioneer in hospital administration, passed away recently.

A Canadian by birth, Miss Henderson took her nursing training at the Toronto General Hospital. Soon after her graduation she went to British Columbia as superintendent of a hospital there. Her excellent work in that position gave her membership in the Victorian Order of Nurses.

In 1904 she joined the staff of the Visiting Nurse Association in Chicago, but was soon asked to head the Children's Hospital Society, an organization then working largely in connection with the Juvenile Court.

She became superintendent of the Children's Memorial Hospital, Chicago, about 1908 which she continued to serve for fifteen years.

In 1923 she resigned from the Children's Memorial Hospital to become superintendent of the Children's Hospital in Milwaukee. Here she also supervised the Convalescent Home for Children near that city.

Always keenly interested in the nursing profession she worked hard to help pass the Illinois State Registration Act. She was also for a time on the board of the American Journal of Nursing. These activities gained her many friends.

In 1934 she retired to her home in Putney, Vermont, where she passed away January 15, 1939.

William P. Gest

William P. Gest, a trustee of Presbyterian Hospital, Philadelphia, and an active member of the American Hospital Association since 1923, passed away January 3, 1939.

Hospital ~~Exhibitors'~~ Industries Association

HOSPITAL INDUSTRIES ASSOCIATION MEMBERSHIP 1938-39

A. S. Aloe Co.	St. Louis, Mo.
American Hospital Supply Corp.	Chicago, Ill.
American Laundry Mach'y. Co.	Cincinnati, Ohio
American Sterilizer Co.	Erie, Pa.
Angelica Jacket Co.	St. Louis, Mo.
James L. Angle Co.	Ludington, Mich.
Applegate Chemical Co.	Chicago, Ill.
Armstrong Cork Products Co.	Lancaster, Pa.
Bard-Parker Co., Inc.	Danbury, Conn.
Bassick Co.	Bridgeport, Conn.
Becton, Dickinson & Co.	Rutherford, N. J.
Bruck's Nurses' Outfitting Co., Inc.	N. Y. City
The Burrows Company	Chicago, Ill.
Carolina Absorbent Cotton Co.	Charlotte, N. C.
Clark Linen Co.	Chicago, Ill.
Clay-Adams Co., Inc.	New York City
Warren E. Collins, Inc.	Boston, Mass.
Crane Co.	Chicago, Ill.
Cutter Laboratories	Berkeley, Calif.
F. A. Davis Co.	Philadelphia, Pa.
Davis & Geck, Inc.	Brooklyn, N. Y.
J. A. Deknatel & Son, Inc.	Long Island, N. Y.
DePuy Manufacturing Co.	Warsaw, Ind.
Doehler Metal Furniture Co., Inc.	N. Y. City
Eichenlaub Bros.	Pittsburgh, Pa.
Eisele & Co.	Nashville, Tenn.
Faichney Instrument Corp.	Watertown, N. Y.
Faultless Caster Co.	Evansville, Ind.
Finnell System, Inc.	Elkhart, Ind.
J. B. Ford Sales Co.	Wyandotte, Mich.
General Electric X-Ray Corp.	Chicago, Ill.
General Foods Sales Co., Inc.	New York City
Glasco Products Co.	Chicago, Ill.
Frank A. Hall & Son	New York City
Hill-Rom Co., Inc.	Batesville, Ind.
Hobart Mfg. Co.	Troy, Ohio
Hospital Equipment Corp.	New York City
Hospital Management	Chicago, Ill.
Hospital Topics & Buyer	Chicago, Ill.
Huntington Laboratories, Inc.	Huntington, Ind.
Inland Bed Co.	Chicago, Ill.
International Nickel Co., Inc.	New York City
Jamieson, Inc.	Chicago, Ill.
Jarvis & Jarvis, Inc.	Palmer, Mass.
Johnson & Johnson	New Brunswick, N. J.
H. L. Judd Co., Inc.	New York City
Kelley-Koett Mfg. Co.	Covington, Ky.
Kenwood Mills	Albany, N. Y.
The Kent Co., Inc.	Rome, N. Y.
Samuel Lewis Co., Inc.	New York City
Lewis Manufacturing Co.	Walpole, Mass.
Marvin-Neitzel Corp.	Troy, N. Y.
Massillon Rubber Co.	Massillon, Ohio
Meinecke & Co.	New York City
The Mennen Co.	Newark, N. J.
Midland Chem. Lab., Inc.	Dubuque, Iowa
Modern Hospital Publishing Co.	Chicago, Ill.
Morris Supply Co.	New York City
National Lead Co.	New York City
Ohio Chemical & Mfg. Co.	Cleveland, Ohio
Oxygen Equipment Mfg. Co.	New York City
Parke Davis & Co.	Detroit, Mich.
Physicians' Record Co.	Chicago, Ill.
Puritan Compressed Gas Corp.	Kansas City, Mo.
Republic Steel Corp.	Cleveland, Ohio
Rhoads & Co.	Philadelphia, Pa.
Rolscreen Co.	Pella, Iowa
Will Ross, Inc.	Milwaukee, Wis.
W. B. Saunders Co.	Philadelphia, Pa.
Scanlan-Morris Co.	Madison, Wis.
F. O. Schoedinger	Columbus, Ohio
Schwartz Sectional System	Indianapolis, Ind.
Ad. Seidel & Sons	Chicago, Ill.
John Sexton & Co.	Chicago, Ill.
The Simmons Co.	Chicago, Ill.
Snow-White Garment Mfg. Co.	Milwaukee, Wis.
Spring Air	Holland, Mich.
E. R. Squibb & Sons, Inc.	New York City
Standard Apparel Co.	Cleveland, Ohio
Standard Electric Time Co.	Springfield, Mass.
Standard Sanitary Mfg. Co.	Pittsburgh, Pa.
Stanley Supply Co.	New York City
Thorner Brothers	New York City
Troy Laundry Machinery Corp.	New York City
Union Carbide Co.	New York City
United States Hoffman Mach'y Corp.	N. Y. City
Vestal Chem. Laboratories, Inc.	St. Louis, Mo.
Vitamin Products Co.	Milwaukee, Wis.
C. D. Williams & Co.	Philadelphia, Pa.
Williams Pivot Sash Co.	Cleveland, Ohio
Wilmot Castle Co.	Rochester, N. Y.
Wilson Rubber Co.	Canton, Ohio
Zimmer Manufacturing Co.	Warsaw, Ind.

No, we of the Association aren't going to stop exhibiting – far from it! We'll still want to show you our wares.

But as an Association we are carrying on many activities far removed from convention exhibits. So our new name should better indicate this broader scope:

Hospital Industries Association
the Association of Industries serving Hospitals

You'll still see this familiar insignia, altered only in detail.

What's behind this new name? We'll let you in on the secret – the next several issues of this magazine will bring you messages defining our wider range of constructive activity.

Hospital Industries Association

formerly HOSPITAL EXHIBITORS' ASSOCIATION

Hospital Conventions and Conferences

Tennessee Hospital Association, Jackson, April 10
Ohio Hospital Association, Columbus, April 11-13
Southeastern Hospital Conference, Jacksonville, Florida, April 13-15
Carolinas-Virginia Hospital Conference, Roanoke, Virginia, April 20-22
Mid-West Hospital Association, Hot Springs, Arkansas, April 20-21
Texas State Hospital Association, Fort Worth, April 21-22
Iowa Hospital Association, Cedar Rapids, April 24-26
Hospital Association of Pennsylvania, Philadelphia, Pennsylvania, April 26-28
Michigan Hospital Association (with Tri-State), Stevens Hotel, Chicago, May 3-5
Tri-State Hospital Assembly (Illinois, Indiana, and Wisconsin), Stevens Hotel, Chicago, May 3-5
Ontario Hospital Association, Toronto, May 3-5
Mississippi Hospital Association, Gulfport, May 8
Hospital Association of the State of New York, New York City, May 17-19
Kentucky Hospital Association, Louisville, May 23-24
Minnesota Hospital Association, St. Paul, May 25-27
Catholic Hospital Association, Milwaukee, Wisconsin, June 5-9
New Jersey Hospital Association, Atlantic City, June 8-10
Hospital Association of Nova Scotia and Prince Edward Island, Amherst, N. S., June 15-16
New Brunswick Hospital Association, Sacksville, June 15-16
American Association of Medical Social Workers, Buffalo, New York, June 18-24
Manitoba Hospital Association, Winnipeg, June 22
National Hospital Association, New York City, August 13-15
International Hospital Association, Toronto, September 19-23
Canadian Hospital Council, Toronto, September 21-22
American Protestant Hospital Association, Toronto, September 22-24
Amercan College of Hosptal Administrators, Toronto, September 24-25
American Hospital Association, Toronto, September 25-29
American Occupational Therapy Association, Toronto, September 25
National Association of Nurse Anesthetists, Toronto, September 26-29
Saskatchewan Hospital Association, Saskatoon, October.

April and May are two months when state, provincial, and regional hospital associations hold their annual conventions. These are staged immediately following the standardization conferences held at the sectional meetings of the American College of Surgeons, under the direction of Dr. Malcolm T. MacEachern.

The hospital field in the various geographical areas of the United States and Canada gather in their conventions and conferences and discuss programs for improving the old and developing the new methods for the operation of their hospitals and the better care of their patients. These meetings are of incalculable value to our institutions, and the hospital people who administer and operate them.

These conferences supplement the annual conventions of the national hospital associations held later on, and help crystallize policies and procedures which can be readily adapted to the improvement of hospital care.

The first association to hold their convention in April is the *Tennessee Hospital Association.* Their convention will be held in Jackson, April 10, with V. R. Bottomley, Superintendent of the Takoma Hospital, Greenville, as president. The Tennessee Hospital Association has taken a new lease on life, and from now on its annual conventions will be of larger interest and value. The program this year has been well arranged and will attract a large attendance.

The Ohio Hospital Association will hold its twenty-fifth annual convention in Columbus, April 11-13. Dr. Fred G. Carter, superintendent of Christ Hospital, Cincinnati, is the president.

Meeting with the Ohio Hospital Association will be the Ohio Dietetic Association, Ohio Association of Record Librarians, Ohio Association of Nurse Anesthetists, Hospital Obstetric Society of Ohio, and the Ohio Society of Medical Technologists.

Among those appearing on the program are Dr. R. C. Buerki, Martha M. Bailer, Dr. H. L. Rockwood, R. P. Buchman, Dr. Edward L. Cornell, George P. Bugbee, Dean Edward Spease of Western Reserve University, and others. The association will formally open with an Exhibitors' Luncheon, with Dr. Fred G. Carter presiding.

The Southeastern Hospital Conference will be held in Jacksonville, Florida, April 13-15. This will be a joint meeting of the hospital associations of Georgia, Florida, and Alabama. Fred M. Walker, superintendent of Duval County Hospital, Jacksonville, is president. One of the features of this conference will be an address by Dr. G. Harvey Agnew, President of the American Hospital Association.

The *Mid-West Hospital Association,* the fourth association to hold its convention in April, will convene at Hot Springs, Arkansas, April 20-21. Dr. E. T. Olsen, superintendent of the University Hospitals, Oklahoma City, is the president.

Among those who will address the convention are the Rt. Rev. Msgr. John J. Healy, Regina Kaplan, P. P. Patraw, John R. Thompson, Alden B. Mills, Lee C. Gammill, Mrs. Elizabeth Woolson, Dr. C. Rufus Rorem, Dr. H. A. Black, Ray F. McCarthy, Arden E. Hardgrove, John O. Steel, E. E. King and Dr. Bert W. Caldwell.

This Association is composed of the hospital associations of Missouri, Arkansas, Oklahoma, Nebraska, and Colorado.

Complete
HOSPITAL DAY PUBLICITY

Prepared to help you make National Hospital Day, (May 12), the biggest and best yet. A well-planned service designed to fill the needs of both the large and small hospital.

Posters—beautifully designed and colored.
Postcard invitations.
Illustrated blotters.
Movie film trailers.
Automobile bumper signs.
Gummed stickers for your mail.
Folders for patients' trays.
Lapel buttons
Folder rack with complete service of **six folders** (choice of 10 appropriately illustrated pieces).

WRITE NOW for complete information on Hospital Day Publicity

I 4-39

PHYSICIANS' RECORD CO.

The Largest Publishers of Hospital and Medical Records

161 W. Harrison Street Chicago, Ill.

NATIONAL HOSPITAL DAY MAY 12TH

A Monthly Magazine

A Daily Reference Book

The American Journal of Nursing

•

The Magazine of
The American Nurses' Association
and
The National League of Nursing Education

The American Journal of Nursing H 4-39
50 West 50th Street, New York City
Please send The American Journal of Nursing
1 year $3 ☐ **2 years $5** ☐
(Canada 50c extra a year)

Name .....

Address .....

City..... **State**.....

SURGERY on the 999th floor

MAMMOTH surgery in a mammoth hospital. Up 999 floors. Every floor with more than 150,000 beds. Over one hundred and fifty million beds in all! That is the size of the hospital needed for all the patients who have been admitted to hospitals in this country since Will Ross began furnishing needed supplies to this gigantic service organization. Twenty-five years is a long time . . . in the service of the sick. Long enough to have seen great strides forward in medicine, surgery, hospital equipment and supplies.

Progress in this latter field must be measured, not by any single accomplishment, but by broad, aggregate attainment . . . reached through intensive, searching experience; intelligent understanding of problems that must be met; constant improvement of merchandise and service; close adherence to basic ideals and guiding principles.

Will Ross is glad to have had an active part is this progress.

WILL ROSS, INCORPORATED
Wholesale Distributors and Manufacturers of Hospital Supplies
3100 WEST CENTER ST. • MILWAUKEE, WISCONSIN

A 2528-½

The Carolina-Virginia Hospital Conference is scheduled for April 20-22 at Roanoke, Virginia. O. K. Fike, managing director of Johnston-Willis Hosptal, is president.

Among the distinguished speakers listed are the Honorable James H. Price, Dr. Malcolm T. MacEachern, Dr. G. Harvey Agnew, Dr. Joseph C. Doane, Dr. R. C. Buerki, Dr. O. N. Anderson, Ann Tracey, Jennie C. Jones, Gerhart Hartman, Fred M. Walker, Frank Van Dyk, James A. Hamilton, Dr. O. M. Showalter, S. H. Hunt, Louise Wyant, J. L. Melvin, and Dr. John Bell Williams. At the President's Session, Dr. G. Harvey Agnew, President of the American Hospital Association, will deliver the presidential address.

The Texas Hospital Association Convention will be held in Fort Worth, April 21-22, with Mrs. Josie M. Roberts, superintendent of the Methodist Hospital, Houston, as president. The programs of the Texas Hospital Association are always of value and the annual conventions are well attended. The meeting in Fort Worth this year promises to be the largest in the history of the Texas Hospital Association.

The Iowa Hospital Association will hold its convention in Cedar Rapids, April 24-26. F. P. G. Lattner, superintendent of Finley Hospital, Dubuque, is president. The program that is being arranged for this convention is an excellent one, and Cedar Rapids, because of its fine facilities for convention purposes, will draw one of the largest attendances in recent years.

The Pennsylvania Hospital Association Convention will be held in Philadelphia, April 26-28, with John N. Hatfield, superintendent of the Pennsylvania Hospital, as president. The meeting of the Pennsylvania Hospital Association will be one of the largest state hospital association meetings held anywhere during the year.

Among those appearing on the program are Mary A. Rothrock, Mary B. Miller, Beatrice Ritter, Katherine Tucker, Dr. John C. Davis, Jessie J. Turnbull, M. H. Eichenlaub, Melvin L. Sutley, Dr. Malcolm T. MacEachern, Davis B. Skillman, Dr. Joseph W. Mountin, Raymond T. Hosford, Olin T. Evans, W. W. Butts, Horace C. Cooper, R. Stewart Miller, Allen Johnson, Ralph W. Pressey, William E. Barron, Nellie S. Parks, Sister M. Avellino, Ray B. Hall, Dr. E. A. Vonderlehr, S. Paul Campbell, Major N. J. Sepp, E. E. Matthews, and Harold T. Prentzel.

The New England Hospital Association

The New England Hospital Association held its Seventeenth Annual Meeting in Boston on March 9, 10, and 11. The Massachusetts Hospital Association held its annual meeting at the same time.

The educational and gadget exhibits attracted the attention of large groups of visitors, and the commercial concerns participating in the exhibit of the Convention this year showed unusually interesting and complete lines of hospital equipment and supplies.

Among the subjects presented for discussion in the program were "Voluntary Hospitals and the National Health Program" by Assistant Surgeon General Joseph W. Mountain of the U.S.P.H.S.; "An Approach to the Hospital Personnel Problems" by James A. Hamilton; "Trends in Hospital Care Insurance" by C. Rufus Rorem, Ph.D.; "Cooperation between Doctors, Surgeons, and Hospital Superintendents in the Treatment of Diabetes" by Elliott P. Joslin, M.D.; and "Uniform Hospital Accounting—Its Need and Value" by William A. Dawson. A symposium of "Hospital Extension Service" led by Samuel Proger, M.D., medical director of the Pratt Diagnostic Hospital, Boston, and participated in by Julius Gottlieb, M.D., Irene Zwisler, R.N., Roland Clapp, M.D., of Lewiston; Helen Goodwin, R.N., of Rumford, Maine; and Francis A. Winchenbach, M.D., held the attention of the large audience.

Two features of the program are worthy of particular mention: (1) the presentation of an illustrated lecture "Nurseries and the Newborn in Hospitals" by Henry M. Pollock, M.D.; and (2) the scholarly address by Paul B. White, M.D., on "Medicine and Literature" at the annual dinner.

At the luncheon on Friday, the address was delivered by G. Harvey Agnew, M.D., President of the American Hospital Association, before an assembled group of some four hundred hospital people.

The round table of the Trustees Section on "Trustees of Hospitals" was conducted by C. McGregory Wells, Jr., chairman of the Board of Trustees, Harrington Memorial Hospital, Southbridge, Massachusetts.

The New England Annual Meeting is one that should never be missed by any hospital administrator, trustee, or member of the staff who can arrange to attend. The program this year was most instructive and the discussions were of more than ordinary interest.

The following officers were elected:

President—Warren F. Cook, M.D., New England Deaconess Hospital, Boston.
Vice-President—Charles F. Wilinsky, M.D., Beth Israel Hospital, Boston.
Treasurer—Oliver G. Pratt, Salem Hospital, Salem.
Secretary—A. G. Engelbach, M.D., Cambridge Hospital, Cambridge.
Trustees—Celia E. Brian, R.N., Brattleboro Memorial Hospital, Brattleboro; Joelle C. Hiebert, M.D., Central Maine General Hospital, Lewiston; Wilmar M. Allen, M.D., Hartford Hospital, Hartford; Donald S. Smith, Mary Hitchcock Memorial Hospital, Hanover, New Hampshire; William O. Rice, M.D., Rhode Island Hospital, Providence, R. I.

Dress, bib, apron, collar and cuffs—six pieces in one uniform. That's the new, exclusive Marvin-Neitzel student uniform H-718 (Patent applied for). One piece instead of six.

What does that mean in laundry costs? It means dividing that cost by six. Instead of handling six pieces your laundry washes and irons one piece. Sorting is eliminated. It's a money-saver.

H-718 is a neat, attractive garment. The nurses like it because it's good to look at, and it's neat. The bib and apron stay in place.

And like all Marvin-Neitzel garments it is carefully made of excellent material. Reinforced where strain is possible. Pocket corners are bar tacked. Seams are double stitched with strong three-cord thread. Details that may seem of little consequence are carefully watched. Marvin-Neitzel products have made and are continuing to hold a reputation for quality—garments just a little bit better than may seem necessary.

H-718 can be made to duplicate exactly your present uniform ensemble, if you wish. Let us send you a sample for your inspection.

VISIT OUR EXHIBIT
at
Southeastern Hospital Conference
•
Carolinas-Virginia Hospital Conference
•
Iowa Hospital Association
•
Hospital Association of Pennsylvania
and
Pennsylvania Association of Nurse Anesthetists
•
Tri-State Hospital Assembly

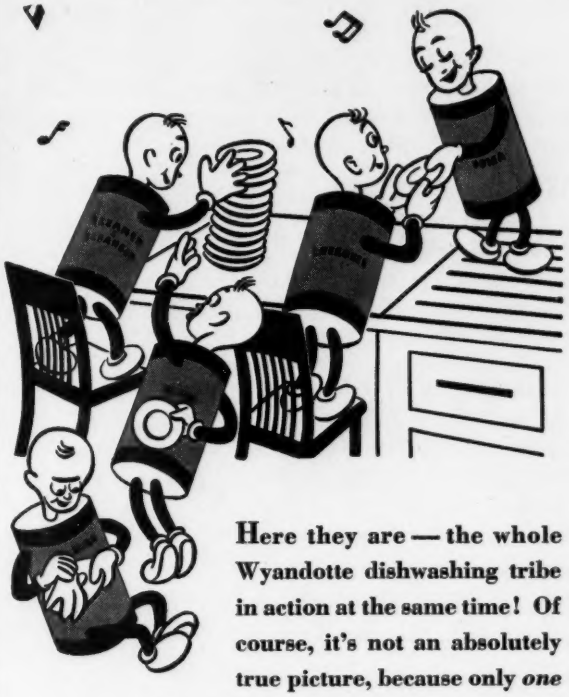
MARVIN-NEITZEL
Since 1845
CORPORATION
TROY, N. Y.

Keego, Poma, Cherokee

Cleaner-Cleanser, H. D. C.—

Wash your dishes—leave no spot—

The merry cleaners of WYANDOTTE



Here they are — the whole Wyandotte dishwashing tribe in action at the same time! Of course, it's not an absolutely true picture, because only *one* Wyandotte cleaner is needed for one dishwashing situation.

But you can see that Wyandotte is prepared with a full line of efficient, economical culinary cleaners — one for every dishwashing operation — by hand or machine — in hard, medium or soft water.

Your Wyandotte Service Representative will be glad to help you find the right Wyandotte cleaner for *your* dishwashing need.

THE
J. B. FORD COMPANY
WYANDOTTE, MICHIGAN
District Offices in 26 Cities

News Notes

Philip Becker, M.D., medical assistant at the Lake County Tuberculosis Sanatorium, Crown Point, Indiana, and acting superintendent since the death of **Dr. James O. Parramore** in January, has been appointed superintendent of the Sanatorium.

Mrs. Clara Burke, superintendent of the DeTar Memorial Hospital, Victoria, Texas, has been appointed superintendent of the new Wharton County Hospital, Wharton, Texas.

Edna M. Carlson, who has been supervisor of nurses at Rockaway Beach Hospital, Rockaway Beach, New York, for the past two years, has resigned. **Mildred Mullins,** who held a similar position at Murray Hill Hospital, New York City, succeeds Miss Carlson.

Michael A. Cunningham, M.D., has been appointed superintendent and medical director of the Jefferson County Tuberculosis Hospital, Beaumont, Texas. **Mrs. Caroline Van Zandt,** who has been superintendent of the hospital for the last twelve years, is remaining in an administrative capacity. Dr. Cunningham was assistant superintendent of the Iowa State Sanatorium for thirteen years and was medical director of the Holy Cross Sanatorium, Deming, New Mexico, for eleven years.

Edna G. Davidson has accepted the appointment as superintendent of the Black Hills Methodist Hospital, Rapid City, South Dakota.

Glen W. Fausey resigned as superintendent of the Pontiac General Hospital, Pontiac, Michigan, to accept the superintendency of the Edward W. Sparrow Hospital, Lansing, Michigan. Mr. Fausey succeeds **Adelaide Northam,** who resigned to do some special work at Duke University, Durham, North Carolina.

Ruth Hampton has been appointed superintendent of the Biltmore Hospital, Asheville, North Carolina.

Fred W. Heffinger, who has been superintendent of Mercer Hospital, Trenton, New Jersey, for the past twelve years, has been appointed superintendent of the Manhattan Eye, Ear and Throat Hospital, New York City. He will take over his duties on June 1. Mr. Heffinger succeeds Reuben O'Brien, who has retired after serving as superintendent of the hospital for the past thirty-three years.

Thaddeus J. Montgomery has been appointed business manager of the General Hospital, Cincinnati, Ohio, to succeed **Angelo Doherty** who retired last June.

Arthur L. Nienhuis of Holland, Michigan, has been named superintendent of the new hospital at Allegan, Michigan.

Frances Putnam has been appointed superintendent of nurses of the Roseland Community Hospital, Chicago, to succeed **Edith Bergquist,** who resigned to accept the position as executive secretary of the Illinois State Nurses' Association.

Ola Reagan, who has been superintendent of the hospital in Jasper, Texas, for the past six months, has been appointed superintendent of the Angeline County Hospital at Lufkin, Texas, to succeed **Mrs. Thomas Moore.**

William W. Reynolds, M.D., of Meridian, Mississippi, will succeed **Dr. Lamar F. Arrington** as superintendent of the Mattie Hersee Hospital at Jackson, Mississippi.

Donald M. Rosenberger, who for the past year has been an administrative intern at Pennsylvania Hospital, Philadelphia, has been appointed administrator of the Clearfield Hospital, Clearfield, Pennsylvania. Mr. Rosenberger succeeds **Mary Rothrock,** who resigned to become secretary of the Pennsylvania State Board of Nurse Examiners.

Earl G. Rowley, former superintendent of the Citizens General Hospital, New Kensington, Pennsylvania, has accepted the superintendency of the Homestead Hospital, Homestead, Pennsylvania.

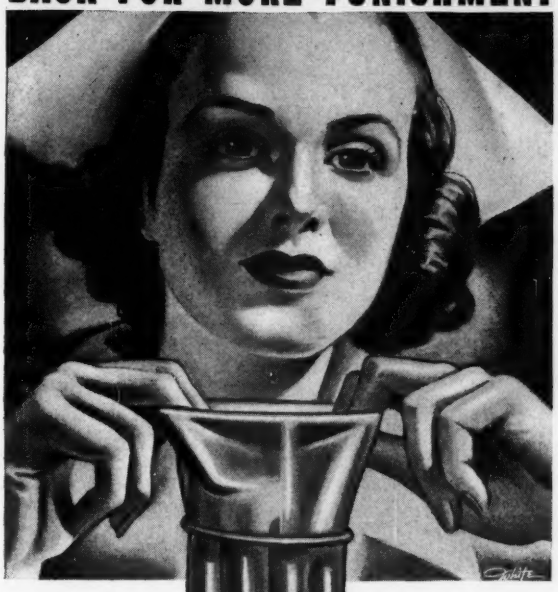
Doris M. Ruddy, superintendent of St. Luke's Hospital, Thief River Falls, Minnesota, has resigned because of ill health. Miss Ruddy expects to go to Glendale, California, for a rest.

Edna Scott has been appointed superintendent of the Randolph County Hospital at Winchester, Indiana.

W. R. Summers, M.D., who has been acting superintendent of the Central State Hospital at Lakeland, Kentucky, since September of last year, has been appointed superintendent of the institution.

Richard T. Viguers, succeeds Isabel Bennett as administrator of the Bound Brook Hospital, Bound Brook, New Jersey. This hospital which has been serving the community for the past twelve years as a private hospital, has been reorganized as a non-profit institution under the direction of a

BACK FOR MORE PUNISHMENT



After 50 Sterilizations

That's real economy—real budget slashing performance when a thin Latex Surgeon's Glove can come back for more use after so many sterilizations. Wiltex, the Latex gloves with the curved fingers, do just that—their original cost is higher but they resist the extreme heat of the autoclave longer, thereby effecting a greater savings throughout the year.

For a greater reduction in your glove costs, order Wilco, the Brown Latex glove (they will withstand more than 30 sterilizations) or Wiltex, the finest of all White Latex Surgeon's Gloves.

The WILSON RUBBER CO.
World's Largest Manufacturers of Rubber Gloves
CANTON, OHIO

Sole Agents: J. F. HARTZ CO., Ltd. • TORONTO • MONTREAL

Another **OAKITE IDEA** *to help you save!*

CLEANER DISHES *with* NEW

REVOLUTIONARY OAKITE MATERIAL!

GLISTENING dishes . . . with a sparkle and lustre that mean absolute cleanliness . . . are only one advantage you get when quick-acting **OAKITE COMPOSITION No. 63** is used for your dishwashing.

Of course this new, revolutionary material speedily and effectively removes every trace of grease, egg, coffee and fruit juice stains. But . . . because it also softens water without precipitating the salts that tend to form scale deposits, this modern Oakite cleaning material prevents hard water spots and slippery, dingy film. Dishes rinse easily.

Keeps machine in clean condition. Machine operation is better, pipes and spray heads clog less. No lime scale deposits to choke up machine interiors.

Ask for complete information on low-cost, efficient Oakite Composition No. 63. Find out what it can do for you. No obligation.

OAKITE 1909 1939 30

Manufactured only by
OAKITE PRODUCTS, INC.
27 Thames St., NEW YORK, N. Y.
Representatives in all principal Cities of the U. S.

OAKITE *Certified* **CLEANING**
MATERIALS & METHODS FOR EVERY CLEANING REQUIREMENT

board of trustees of which **Harvey S. Smalley, Sr.**, is president.

William L. Wilson, administrative assistant at Strong Memorial Hospital, Rochester, New York, has been appointed superintendent of the Geisinger Memorial Hospital, Danville, Pennsylvania, and will assume his duties there on April 15.

Hot Springs, Arkansas—A new wing will be added to the Army and Navy General Hospital on Hot Springs Mountain, Arkansas, during 1939. The wing, which will cost $100,000, will house a large recreation hall, chapel, new offices for the Red Cross, library for patients, and professional library for the hospital staff.

Eureka, California—A new air conditioning and heating plant has been installed at the Redwoods Sanitarium, Eureka, California.

Los Angeles, California—The construction of a 400-bed isolation hospital, in connection with the Los Angeles County General Hospital, Los Angeles, California, has been recommended by Everett J. Gray, superintendent of the hospital. Rex Thomson, superintendent of county charities, approved the proposal.

Southbury, Connecticut—Ground has been broken for the state school and hospital for feebleminded children at Southbury, Connecticut. The project, which was made possible by an outright PWA grant of $2,576,000 to the State of Connecticut, will consist of 50 buildings including a farm group and all necessary utilities.

Stamford, Connecticut.—A new hospital, to be conducted by the Sisters of St. Joseph, is being planned for Stamford, Connecticut. Raphael Hume of Stamford is the architect and Charles F. Neergaard of New York is the consultant.

Bradenton, Florida—Plans are being made for a new 50-bed county hospital at Bradenton, Florida. The building, which will be erected on the present site of the county hospital, will cost about $104,000.

Fort Pierce, Florida—With the new $75,000 hospital building, which has been under construction at Fort Pierce, Florida, nearing completion, plans are being made for an organization to direct operation of the hospital.

Atlanta, Georgia—The preliminary plans for the proposed medical center to be developed at Grady Hospital, Atlanta, Georgia, show a four-block quadrangle with the present buildings and future additions. The City Council has been asked to close two streets which will be replaced by courts and walkways lined with flowers, shrubbery and trees.

Chanutefield, Illinois—The Thorp and Rogoff Company of Chicago has been awarded a war department contract for construction of hospital quarters, at a cost of $383,455, at Chanutefield, Illinois.

Chicago, Illinois—A new five-story addition is being planned for the South Chicago Hospital, Chicago, Illinois.

Chicago, Illinois—Pledges of $7,500 have been made to re-equip the old Lake View Hospital, Chicago, Illinois. More than one hundred fifty volunteers are working in the campaign to raise $100,000 needed to buy the building from bondholders and modernize the hospital.

Geneseo, IIllinois—A hundred and four women are included in the charter membership of the newly formed Geneseo hospital auxiliary. Mrs. Susie Berner has been elected president.

Pittsfield, Illinois—Plans are being completed for the new $300,000 county hospital to be erected at Pittsfield, Illinois.

Brazil, Indiana—A PWA allotment of $7,204 has been made for the improvement of the Clay County Hospital, Brazil, Indiana. The project will consist of renovating and redecorating the hospital and improving the grounds.

Clarinda, Iowa—Ten organizations and individuals in Clarinda, Iowa, have agreed to furnish rooms in the new municipal hospital. Bronze plates will be furnished for each room with name of the donors.

Maysville, Kentucky—Sketches are being made for a 60-bed Mason County infirmary building at Maysville, Kentucky. The building, which will cost $30,000, will be located on the farm where the present infirmary stands, but on higher ground out of the flood district.

Alexandria, Louisiana—A modernization program which will increase the capacity of the hospital from 77 to 83 beds is under way at the Baptist Hospital, Alexandria, Louisiana. The addition and improvements will cost $25,000.

Monroe, Louisiana—Bids have been received for construction of the new state charity hospital at Monroe, Louisiana. The new hospital will cost $750,000 and provide rooms for 300 patients.

Worcester, Massachusetts—Enlarging the accident ward of Worcester City Hospital, Worcester, Massachusetts, to double its present floor space has been made possible by Federal approval of a WPA grant for labor.

Allegan, Michigan—Plans are being made for

EVERYTHING YOU'VE WANTED IN A LIQUID SOAP DISPENSER

• PLENTY OF SOAP

Little chance that you'll run short of soap because the base of Pedalikwid contains a *1-gallon tank!* No glass to break.

• WHERE YOU WANT IT

Because Pedalikwid is completely self-contained it can be readily placed anywhere without requiring installation. The weight being at the base, Pedalikwid stands firmly. The polished stainless steel spout swivels in a complete circle, permitting the dispenser to be used between basins.

• AND READILY DISPENSED

Operated by stepping on the foot pedal. A check valve holds the soap at the spout, ready to be dispensed.

SPECIFICATIONS

All the metal parts which come in contact with the soap are nickel-plated or made of stainless steel. The exposed parts are either chromium-plated or porcelain enameled, making it easy to keep clean and sanitary.

OVERALL HEIGHT 45". SPOUT 9" LONG
TANK 16" LONG AND 3" HIGH
GREATEST WIDTH 9". WEIGHT 27 LBS.
TANK CAPACITY 1 GAL.

BOOKLET on request with detailed information and prices.

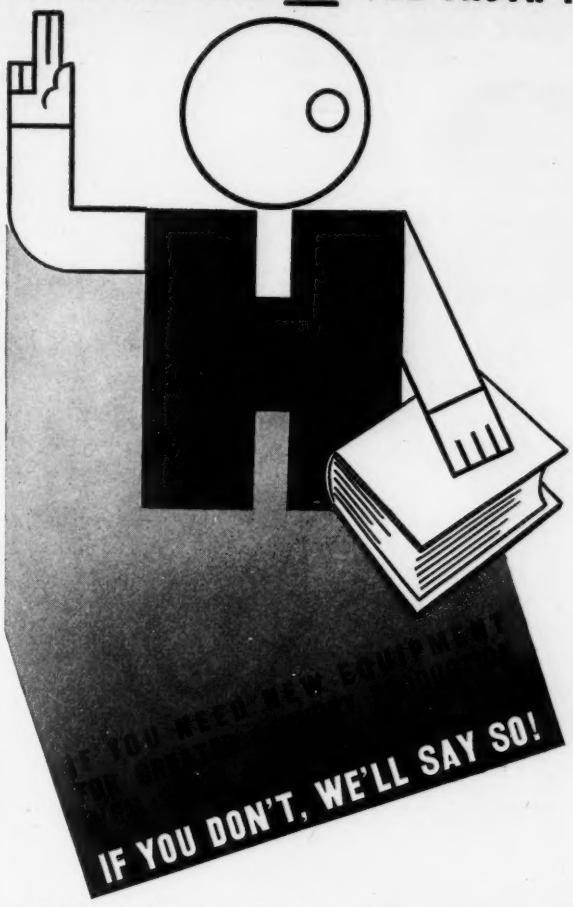
See the West Sanitation Exhibit at the Medical & Public Health Building, New York World's Fair, 1939.

WEST PEDALIKWID

WEST DISINFECTING COMPANY

Dept. HP, 42-16 Barn Street, Long Island City, N. Y.

..AND NOTHING BUT THE TRUTH*!



Superintendents of institutions where we have installed laundry equipment will tell you, "You can rely on Hoffman for the true facts of laundry equipment performance." Hoffman recommendations are trustworthy (1st) because Hoffman laundry engineers have the skill and experience required for accurate surveys; (2nd) because it is Hoffman's policy to be conservative in our claims for production and savings.

CALL HOFFMAN FOR THE TRUTH* ABOUT LAUNDRY OPERATIONS

U. S. HOFFMAN

MACHINERY CORPORATION

111 FOURTH AVENUE · NEW YORK, N. Y.

COMPLETE LAUNDRY EQUIPMENT SERVICE FOR THE INSTITUTION